U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment
DOI-BLM-NV-L000-2017-0006-EA
December 20, 2017

SEAMAN and WHITE RIVER HERD AREA WILD HORSE GATHER

Location: Lincoln and Nye Counties
Applicant/Address:

U.S. Department of the Interior
Bureau of Land Management
Ely District Office
Phone: (775) 289-1800
Fax: (775) 289-1910

1.0 INTRODUCTION

This Environmental Assessment (EA) has been prepared to analyze the Bureau of Land Management (BLM) Bristlecone and Caliente Field Offices, and Basin and Range National Monument proposal to gather and remove excess wild horses from the Golden Gate, Seaman Range, and White River Herd Areas (HAs). The Golden Gate HA and Seaman Range HA were combined (approximately 358,800 acres) through land use planning (the 1986 Egan RMP and 1983 Schell MFP). The Golden Gate and Seaman Range Herd Areas (HAs) would be referred to as the Seaman HA throughout the document. The wild horse gather plan would allow for the initial gather and follow-up gathers to be conducted over the next 10 years from the date of the initial gather to achieve and maintain management goals and objectives. The EA is a site-specific analysis of potential impacts that could result with the implementation of a Proposed Action or alternatives to the Proposed Action.

The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any "significant" impacts could result from the analyzed actions. "No Significance" is determined by the responses to the context and intensity in the Finding of No Significant Impact (FONSI) prepared at the conclusion of the analyses. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of "Finding of No Significant Impact" (FONSI).

This document is tiered to the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (RMP/EIS, 2007) released in November 2007, and the Ely District Record of Decision and Approved Resource Management Plan, as amended in 2015 (RMP, 2008).

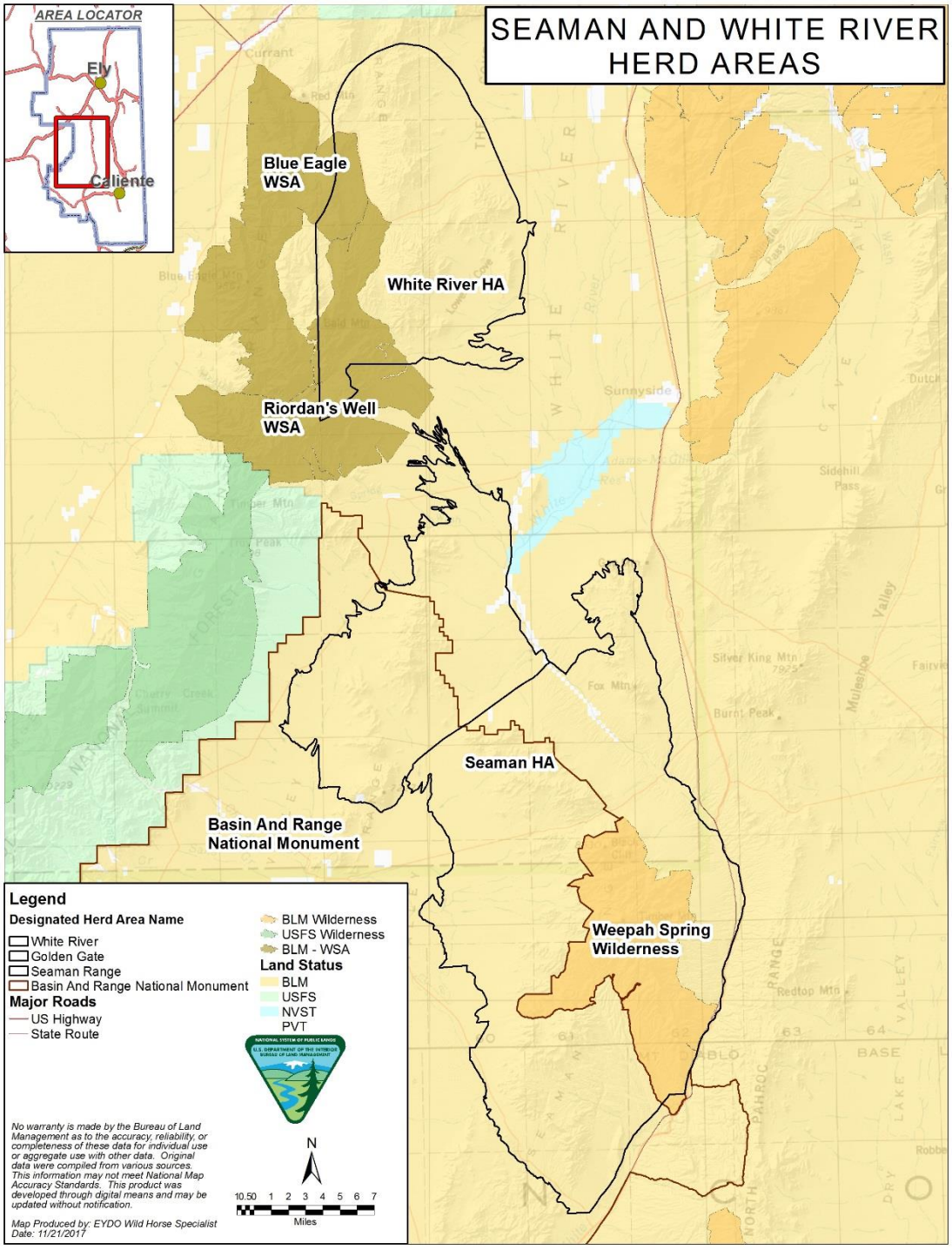
1.1 Background:

The Seaman and White River HAs are located approximately 80 miles southwest of Ely, Nevada, in portions of Nye and Lincoln Counties (Map 1). The HAs encompass approximately 475,100 acres. Under the 2008 Ely District ROD and Approved RMP, no wild horses are to be managed within the three areas based on analysis of habitat suitability and monitoring data which indicates insufficient forage and water is available to maintain healthy wild horses and rangelands over the long-term.

Since the passage of the Wild Free-Roaming Horses and Burros Act (WFRHBA) of 1971, BLM has refined its understanding of how to manage wild horse population levels. By law, BLM is required to control overpopulation, by removing excess animals, once a determination has been made that excess animals are present and removal is necessary. Program goals have always been to establish and maintain a "thriving natural ecological balance," which requires identifying the Appropriate Management Level (AML) for individual herds and within Herd Management Area (HMA) boundaries. In the past two decades, goals have also explicitly included conducting gathers and applying contraceptive treatments to achieve and maintain wild horse populations within the established AML, so as to manage for healthy wild horse populations and healthy rangelands.

The Ely District Record of Decision (ROD) and Approved Resource Management Plan (RMP) (August 2008) at Management Action WH-5, which states: *"Remove wild horses and drop herd management area status for those … as listed in Table 13."* Seaman and White River were reverted from Herd Management Area (HMA) to Herd Area (HA) status with this management action and identified the need to have all excess wild horses from these HAs (manage "0" wild

horses). The management action of achieving 0 wild horses within the Seaman HA as well as White River HA result of an management evaluation using multi-tiered analysis from the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) table 3.8-2 and page 4.8-2. The EIS (November 2007) evaluated each HMA within the Ely District for five essential habitat components and herd characteristics: forage, water, cover, space, and reproductive viability. If one or more of these components were missing, or there was no potential for a stable shared genetic pool, the HMA was considered unsuitable. The Seaman HA as well as White River HA have inadequate forage, marginal to very little water on public lands, and inadequate reproductive viability. The combined Seaman HA also has no summer habitat and inadequate cover.



Map 1. Seaman and White River HA, Basin and Range National Monument, Wilderness and Wilderness Study Area Boundaries.

Table 1. Herd Areas, Acres, Number Wild Horses to Be Managed, Estimated Population

Herd Area Number	Herd Area Name	Estimated Acres	Number Wild Horses to be Managed	Estimated Population
495	Golden Gate	96,247	0	42
411	Seaman Range	262,553		
409	White River	116,300	0	323
Total		475,100		365

The HAs in Table 1 have been gathered periodically since the 1971 Wild Free-Roaming Horses and Burros Act was passed. Many gathers have taken place at different times across the HAs from 1996-2016 to remove excess wild horses due to emergency drought conditions and private property issues.

The Seaman HA has an estimated population of 42 (including the 2017 foal crop) wild horses. The White River HA has an estimated population of 323 (including the 2017 foal crop) wild horses. The estimated population will continue to increase by 20% a year until the implementation of the proposed gather operations. This is based on the population inventory that was conducted for the entire area in February 2016. The inventory was conducted using the Double Simultaneous count method, in which observers in an aircraft independently observe and record groups of wild horses. Sighting rates are estimated by comparing sighting records of the observers. Sighting probabilities for the observers is then computed from the information collected and population estimate generated.

As is true for any estimates of wildlife abundance or herd size, there is always some level of uncertainty about the exact numbers of wild horses or wild burros in any HA/HMA or non-HMA area. The estimates shown here reflect the most likely number of wild horses and burros, based on the best information available to the BLM and may not account for every animal within the HA/HMA. BLM strives to conduct aerial surveys in each HMA/HA once every three years. These surveys result in estimates that statistically account for animals that are not detected by any observer on the flights. In years without surveys, herd size estimates rely on additional information, including known numbers of animals removed and estimated annual population growth rates.

In the 2013 National Academy of Science's (NAS) report "*Using Science to Improve BLM Wild Horse and Burro Program*", the committee's judgment was that the reported annual population statistics are probably underestimates of the actual number of equids on the range inasmuch as most of the individual HMA population estimates are based on the assumption that all animals are detected and counted in population surveys. A large body of scientific literature on techniques for inventorying horses and other large mammals clearly refutes that assumption and suggests that the proportion of animals missed on surveys range from 10 to 50 percent. An earlier National Research Council committee and the Government Accountability Office also concluded that reported statistics were underestimates.

Water available for use by wild horses on public lands within the Seaman HA is very limited. Kirch Wildlife Management Area, water on private land (Murphy Meadows), and spring sources on private and public land located outside the HA boundary provide the only available water in

the northern and central portions of the HA. The Whipple reservoir (private land) which is also located within the central portion of the HA is filled when the Kirch Wildlife Management Area releases water from November through May. The Whipple reservoir regularly goes dry in early summer; which causes the majority of wild horses to search for water outside the HA boundary. There are four springs located in the southern portion of the Seaman HA. These springs provide extremely limited water and only minor amounts of riparian habitat with their associated plant species. Three of the four springs regularly go dry through the summer, causing wild horses to travel seven miles outside the HAs boundary in search for water. The vast majority of the Seaman HA wild horse population reside outside the HA boundaries during the summer months in search of water and summer habitat.

Water available for use by wild horses within the White River HA is also very limited. Water is available for use by wild horses when livestock operators pump the three stock-water wells in the eastern portion of the HA, but that is only from November thru May. There are five springs in the western portion of the HA. Three of these springs regularly go dry through the summer causing wild horses to travel three miles outside the HA boundary in search for water. The vast majority of the White River wild horse population reside outside the HA boundaries during the summer months in search of water. The remaining wild horse population travel outside the HA boundary in search for water but return to the HA for forage.

Monitoring data collected for Seaman and White River HAs during 2009-2017 highlights that utilization by wild horses is moderate to heavy at key areas. Trampling damage by wild horses is evident at most water developments and riparian areas. Heavy trailing by wild horses is evident throughout the HAs especially areas near water. Excess utilization and trampling is currently impacting range conditions; such as forage availability and distribution of wild horses within the area. Limited herbaceous forage is available within key areas and wild horses in some areas heavily hedge browse (scrub) species as the animals search for food. Monitoring also indicates wild horses are routinely residing outside the HAs during the summer months in search of water and summer habitat.

Over-utilization due to concentrated wild horse use outside the White River HA boundary (3/19/15)

Review of forage and water availability thru monitoring indicates that the habitat necessary to maintain wild horses for long-term management is not present within these HAs and the existing excess wild horses need to be removed in order to prevent further deterioration of the range. As a result, any decision of the authorized officer will be implemented effective upon issuance under authority provided in 43 Code of Federal Regulations (CFR) 4770.3 (a) and (c).

1.2 Purpose and Need

The purpose of the Proposed Action is to remove all excess wild horses from areas not designated for their long-term maintenance and to achieve and maintain a thriving natural ecological balance and multiple use relationship as authorized under Section 3(b) (2) of the 1971 Wild Free-Roaming Horses and Burros Act (WFRHBA) and Section 302(b) of the Federal Land Policy and Management Act of 1976 and is in conformance with the decision in the 2008 Ely RMP to return these areas to HA status. Implementation of the Proposed Action is needed to improve watershed health, to make "significant progress towards achievement" of Mojave/Southern Great Basin Resource Advisory Council (RAC) Standards for rangeland health.

1.3 Conformance with BLM Land Use Plan(s):

The Proposed Action is in conformance with the following goal, objective and management action in the 2008 Ely District ROD and Approved RMP (August 2008):

- *Goal:* "Maintain and manage healthy, self-sustaining wild horse herds inside herd management areas within appropriate management levels to ensure a thriving natural ecological balance while preserving a multiple-use relationship with other uses and resources."
- *Objective:* "To maintain wild horse herds at appropriate management levels within herd management areas where sufficient habitat resources exist to sustain healthy populations at those levels."
- *Management Action WH-5:* "Remove wild horses and drop herd management area status for those…as listed in Table 13."

The Proposed Action is in conformance with the following goal, objectives and management action sin the 2015 United States Department of the Interior Greater Sage-Grouse Approved Resource Management Plan Amendment (September 2015)

1.4 Relationship to Statutes, Regulations, or other Plans:

The Proposed Action is consistent with the following Federal, State, and local plans to the maximum extent possible:

- Presidential Proclamation 9297: Establishment of the Basin and Range National Monument (2015).
- Lincoln County Portion (Lincoln/White Pine Planning Area) Sage Grouse Conservation Plan (2004).
- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada Historic Preservation Office (2014)
- Mojave/Southern Great Basin Resource Advisory Council (RAC) Standards and

Guidelines (February 12, 1997)
- Lincoln County Elk Management Plan (2006 revision)
- Endangered Species Act – 1973
- Wilderness Act – 1964
- National Environmental Policy Act of 1969 (as amended
- Migratory Bird Treaty Act (1918 as amended) and Executive Order 13186 (1/11/01)
- Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.)
- Lincoln County Public Land and Natural Resource Management Plan as adopted by the Board of County Commissioners of Lincoln County (December 5, 1997).
- Taylor Grazing Act (TGA) of 1934
- Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1701 et seq.)
- Public Rangelands Improvement Act (PRIA) of 1978
- Title 43 CFR 4100 Grazing Administration-Exclusive of Alaska
- American Indian Religious Freedom Act of 1979 (42 U.S.C. 1996)
- Archaeological Resource Protection Act of 1979, as amended (16 U.S.C. 470aa-mm)
- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001)
- National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108)
- Appropriations Act, 2001 (114 Stat. 1009) (66 Fed. Reg. 753, January 4, 2001)
- United States Department of the Interior Manual (910 DM 1.3).
  Fundamentals of Rangeland Health (43 CFR 4180)

The Proposed Action is consistent with all applicable regulations at Title 43 Code of Federal Regulations (43 CFR) 4700 and policies. The Proposed Action is also consistent with the *Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA),* which mandates the Bureau to *"prevent the range from deterioration associated with overpopulation"*, and *"remove excess horses in order to preserve and maintain a thriving natural ecological balance and multiple use relationships in that area"*. Also the WFRHBA of 1971 sec 3 (b)(1): *"The purpose of such inventory exists and whether action should be taken to remove excess animals; determine appropriate management levels or wild free-roaming horses and burros on these areas of public land; and determine whether appropriate managements should be achieved by the removal or destruction of excess animals, or other options (such as sterilization, or natural control on population levels)."* Additionally, federal regulations at 43 CFR 4700.0-6 (a) state *"Wild horses shall be managed as self-sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat (emphasis added)."*

4710.4 Management of wild horses and burros shall be undertaken with the objective of limiting the animals' distribution to herd areas.

According to 43 CFR 4720.2, upon written request from a private landowner, the authorized officer shall remove stray wild horses and burros from private lands as soon as practicable.

The Interior Board of Land Appeals (IBLA) in Animal Protection Institute et al., (118 IBLA 75

(1991)) found that under the Wild Free-Roaming Horses And Burros Act of 1971 (Public Law92-195) "excess animals" must be removed from an area in order to preserve and maintain a thriving natural ecological balance and multiple-use relationship in that area.

Regulations at 43 CFR 4700.0-6(a) also direct that wild horses be managed in balance with other uses and the productive capacity of their habitat.

2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

2.1 Introduction:

This Chapter of the EA describes the Proposed Action and Alternatives, including any that were considered but eliminated from detailed analysis. Alternatives analyzed in detail include the following:

Proposed Action (Alternative A): Over a ten year period, gather and removal of excess wild horses until management objectives are meant of managing of "0" wild horses within the HAs

No Action Alternative: Under the No Action Alternative, a gather to remove excess wild horses would not occur. There would be no active management to control the size of the wild horse population or to achieve management objectives of managing for "0" wild horses within the HAs.

2.2 Alternative A - Proposed Action:

The Proposed Action is designed to gather and remove excess wild horses over a 10 year time frame and would incorporate follow up gathers until management objectives are meant of managing of "0" wild horses within the HAs. The first portion of the Proposed Action would be to gather 100 percent of the current wild horse population (or approximately 365 excess wild horses). All excess wild horses residing outside the HA boundaries will be removed. However, the initial gather might not obtain a 100% removal of excess wild horses due to terrain and gather efficiencies. Follow up gathers would be needed to remove all excess wild horses within these HA's and effectively return them to HA status. All the animals gathered would be removed and shipped to BLM holding facilities where they would be prepared for adoption and/or sale to qualified individuals or long term holding.

All capture and handling activities (including capture site selections) would be conducted in accordance with the Standard Operating Procedures (SOPs) described in Appendix I. Multiple capture sites (traps) may be used to capture wild horses from the HAs. Capture techniques would be the helicopter-drive trapping method and/or helicopter-roping from horseback, or bait and water trap methods. Management Actions would be as follows:

- Gather operations may involve areas beyond the Herd Area boundaries.
- Gather operations would be conducted in accordance with the Comprehensive Animal Welfare Program (CAWP) for Wild Horses and Burro Gathers, which includes provisions of the Comprehensive Animal Welfare Program (BLM Instruction Memorandum 2015-151). A combination of gather methods may be used to complete the management actions and will depend on the needs of the specific actions to which method will be used. This EA and decision would address management needs in regards to emergency situations and private land issues.
- Trap sites and temporary holding facilities would be located in previously used sites or other disturbed areas whenever possible. Undisturbed areas identified as potential trap sites or holding facilities would be inventoried for cultural resources. If cultural resources are encountered, these locations would not be used unless they could be modified to avoid impacts to cultural resources.
- Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum 2015-070).
- A BLM contract Veterinarian, Animal and Plant Health Inspection Service (APHIS) Veterinarian or other licensed Veterinarian would be on call or on site as the gather is started and then as needed for the duration of the helicopter gather to examine animals

and make recommendations to the BLM for the care and treatment of wild horses, and ensure humane treatment. Additionally, animals transported to a BLM wild horse facility are inspected by facility staff and the BLM contract Veterinarian, to observe health and ensure the animals have been cared for humanely.

- Noxious weed monitoring at gather sites and temporary holding corrals would be conducted following the gather by BLM.
- Monitoring of rangeland forage condition and utilization, water availability, aerial population surveys and animal health would continue.
- A comprehensive post-gather aerial population inventory would occur within 12 months following the completion of the gather operation.

Helicopter

If gather operations require a helicopter drive-trap operation, the BLM would use a contractor or in-house gather team to perform the gather activities. The contractor would be required to conduct all helicopter operations in a safe manner and in compliance with Federal Aviation Administration (FAA) regulations 14 CFR § 91.119 and BLM IM No. 2010-164.

Helicopter drive trapping involves use of a helicopter to herd wild horses into a temporary trap. The CAWP outlined would be implemented to ensure that the gather is conducted in a safe and humane manner, and to minimize potential impacts or injury to the wild horses. Traps would be set in an area with high probability of access by horses using the topography, if possible, to assist with capturing excess wild horses residing within the area. Traps consist of a large catch pen with several connected holding corrals, jute-covered wings and a loading chute. The jute-covered wings are made of material, not wire, to avoid injury to the horses. The wings form an alley way used to guide the horses into the trap. Trap locations are changed during the gather to reduce the distance that the animals must travel. A helicopter is used to locate and herd wild horses to the trap location. The pilot uses a pressure and release system while guiding them to the trap site, allowing them to travel at their own pace. As the herd approaches the trap the pilot applies pressure and a prada horse is released guiding the wild horses into the trap. Once horses are gathered they are removed from the trap and transported to a temporary holding facility where they are sorted.

If helicopter drive-trapping operations are needed, BLM would assure that an Animal and Plant Health Inspection Service (APHIS) veterinarian or contracted licensed veterinarian is on-site during the gather to examine animals and make recommendations to BLM for care and treatment of wild horses. BLM staff would be present on the gather at all times to observe animal condition, ensure humane treatment of wild horses, and ensure contract requirements are met.

Bait/Water Trapping

Bait and/or water trapping may be used if circumstances require it or best fits the management action to be taken. Bait and/or water trapping generally require a longer window of time for success than helicopter drive trapping. Although the trap would be set in a high probability area for capturing excess wild horses residing within the area, and at the most effective time periods, time is required for the horses to acclimate to the trap and/or decide to access the water/bait.

Trapping involves setting up portable panels around an existing water source or in an active wild horse area, or around a pre-set water or bait source. The portable panels would be set up to allow wild horses to go freely in and out of the corral until they have adjusted to it. When the wild horses fully adapt to the corral, it is fitted with a gate system. The acclimation of the horses

creates a low stress trapping method. During this acclimation period the horses would experience some stress due to the panels being setup and perceived access restriction to the water/bait source.

When actively trapping wild horses, the trap would be staffed or checked on a daily basis by either BLM personnel or authorized contractor staff. Horses would be either removed immediately or fed and watered for up to several days prior to transport to a holding facility. Existing roads would be used to access the trap sites.

Gathering excess horses using bait/water trapping could occur at any time of the year and traps would remain in place until the target number of animals are removed. Generally, bait/water trapping is most effective when a specific resource is limited, such as water during the summer months. For example, in some areas, a group of wild horses may congregate at a given watering site during the summer because few perennial water resources are available nearby. Under those circumstances, water trapping could be a useful means of reducing the number of horses at a given location, which can also relieve the resource pressure caused by too many horses. As the proposed bait and/or water trapping in this area is a low stress approach to gathering wild horses, such trapping can continue into the foaling season without harming the mares or foals.

Gather Related Temporary Holding Facilities (Corrals)

Wild horses that are gathered would be transported from the gather sites to a temporary holding corral in goose-neck trailers. At the temporary holding corral, wild horses would be sorted into different pens based on sex. The horses would be aged and provided good quality hay and water. Mares and their un-weaned foals would be kept in pens together. At the temporary holding facility, a veterinarian, when present, would provide recommendations to the BLM regarding care and treatment of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA).

Transport, Off-range Corrals, and Adoption Preparation

All gathered wild horses would be removed and transported to BLM holding facilities where they would be inspected by facility staff and if needed a contract veterinarian to observe health and ensure the animals are being humanely cared for.

Those wild horses that are removed from the range and are identified to not return to the range would be transported to the receiving off-range corrals (ORC, formerly short-term holding facility) in a goose-neck stock trailer or straight-deck semi-tractor trailers. Trucks and trailers used to haul the wild horses would be inspected prior to use to ensure wild horses can be safely transported. Wild horses would be segregated by age and sex when possible and loaded into separate compartments. Mares and their un-weaned foals may be shipped together. Transportation of recently captured wild horses is limited to a maximum of 12 hours.

Upon arrival, recently captured wild horses are off-loaded by compartment and placed in holding pens where they are provided good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. At the off-range corral, a veterinarian provides recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild horses. Wild horses in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries.

After recently captured wild horses have transitioned to their new environment, they are prepared for adoption, sale, or transport to long-term grassland pastures. Preparation involves freeze-marking the animals with a unique identification number, vaccination against common diseases, castration, and de-worming. At ORC facilities, a minimum of 700 square feet of space is provided per animal.

Adoption

Adoption applicants are required to have at least a 400 square foot corral with panels that are at least six feet tall. Applicants are required to provide adequate shelter, feed, and water. The BLM retains title to the horse for one year and inspects the horse and facilities during this period. After one year, the applicant may take title to the horse, at which point the horse becomes the property of the applicant. Adoptions are conducted in accordance with 43 CFR Subpart 4750.

Sale with Limitations

Buyers must fill out an application and be pre-approved before they may buy a wild horse. A sale-eligible wild horse is any animal that is more than 10 years old or has been offered unsuccessfully for adoption at least three times. The application also specifies that buyers cannot sell the horse to slaughter buyers or anyone who would sell the animals to a commercial processing plant. Sales of wild horses are conducted in accordance with the 1971 WFRHBA and congressional limitations.

Off-Range Pastures

When shipping wild horses for adoption, sale, or Off-Range Pastures (ORPs) the animals may be transported for up to a maximum of 24 hours. Immediately prior to transportation, and after every 24 hours of transportation, animals are offloaded and provided a minimum of 8 hours on-the-ground rest. During the rest period, each animal is provided access to unlimited amounts of clean water and two pounds of good quality hay per 100 pounds of body weight with adequate space to allow all animals to eat at one time.

Mares and sterilized stallions (geldings) are segregated into separate pastures, except at one facility where geldings and mares coexist. Although the animals are placed in ORP, they remain available for adoption or sale to qualified individuals; and foals born to pregnant mares in ORP are gathered and weaned when they reach about 8-12 months of age and are also made available for adoption. The ORP contracts specify the care that wild horses must receive to ensure they remain healthy and well-cared for. Handling by humans is minimized to the extent possible although regular on-the-ground observation by the ORP contractor and periodic counts of the wild horses to ascertain their well-being and safety are conducted by BLM personnel and/or veterinarians.

Euthanasia or Sale without Limitations

Under the WFRHBA, healthy excess wild horses can be euthanized or sold without limitation if there is no adoption demand for the animals. However, while euthanasia and sale without limitation are allowed under the statute, these activities have not been permitted under current Congressional appropriations for over a decade and are consequently inconsistent with BLM policy. If Congress were to lift the current

appropriations restrictions, then it is possible that excess horses removed from the HMA over the next 10 years could potentially be euthanized or sold without limitation consistent with the provisions of the WFRHBA.

Any old, sick or lame horses unable to maintain an acceptable body condition (greater than or equal to a Henneke BCS of 3) or with serious physical defects would be humanely euthanized either before gather activities begin or during the gather operations. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum (WO IM) 2015-070 or most current edition). Conditions requiring humane euthanasia occur infrequently and are described in more detail in Washington Office Instruction Memorandum 2009-041.

Public Viewing Opportunities

Opportunities for public observation of the gather activities on public lands would be provided, when and where feasible, and would be consistent with WO IM No. 2013-058 and the Visitation Protocol and Ground Rules for Helicopter WH&B Gathers. This protocol is intended to establish observation locations that reduce safety risks to the public during helicopter gathers (see Appendix II).

2.3 Alternative B - No Action:

Although the No Action Alternative does not comply with the WFRHBA of 1971, regulations, Approved Ely District Resource Management Plan (August 2008) and does not meet the purpose and need for action in this EA, it is included as a basis for comparison with the Proposed Action.

Under the No Action Alternative, a gather to remove excess wild horses would not occur. There would be no active management to control the size of the wild horse population or to bring the wild horse population to AML. The current wild horse population would continue to increase as wild horse populations grow at an average rate of 20-25% per year. In two years from 2017, the wild horse population would exceed 525 head which is 525 times the AML. The BLM would continue vegetation and population monitoring. Rangeland deterioration would continue within the Seaman and White River HAs due to the excess population of wild horses. Wild Horses would continue to reside outside HA boundaries and nuisance concerns would increase around private property as wild horses search for forage and water resources.

The No Action is also contrary to the management prescribed in the Record of Decision (ROD) and Approved Ely District Resource Management Plan (August 2008) as it would leave wild horses remaining outside the boundaries of the HAs on public lands not designated for their management. Under the no action alternative, WH-5 would not be achieve at this time. WH-5 states: "Remove wild horses and drop herd management area status for those areas that do not provide sufficient habitat resources to sustain healthy populations…"

The No Action Alternative would not comply with the 1971 WFRHBA or with applicable regulations and Bureau policy, nor would it comply with the Mojave/Southern Great Basin RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro Populations. However, it is included as a baseline for comparison with the Proposed Action, as required under the 1969 National Environmental Policy Act (NEPA).

2.4 Alternatives Considered, but Eliminated from Further Analysis

2.4.1Water/Bait Trapping Alternative

An alternative considered but eliminated from detailed analysis was use of bait and/or water trapping as the sole gathering method. The use of bait and water trapping, though effective in specific areas and circumstances, would not be timely, cost-effective or practical as the sole gather method for these HAs. However, water or bait trapping may be used as a supplementary approach to achieve the desired goals of Alternatives A if gather efficiencies are too low using a helicopter or a helicopter gather cannot be timely scheduled. The use of only bait and/or water trapping was dismissed from detailed analysis as it was determined this method would not fully meet the purpose and need for action as there is a lack of adequate road access or ability for cross country motorized travel. This would make it technically infeasible to construct traps and safety transport capture wild horses from these areas. This alternative was dismissed from detailed study as a primary or sole gather method for the following reasons:

1. The project area is too large to effectively use this gather method as the primary or sole method;
2. Road access for vehicles to potential trapping locations necessary to get equipment in/out as well as safely transport gathered wild horses is limited.
3. The large numbers of horses proposed to be gathered would make water or bait trapping as a sole means impossible within a reasonable time frame.

2.4.2 Field Darting PZP Treatment *to Reduce Population*

Field Darting PZP treatment to reduce population would not meet the purpose and need to remove all the horses from the Seaman and White River HAs. This method would require BLM to administer PZP in the one year liquid dose inoculations by field darting the mares. This method is currently approved for use and is being utilized by BLM in other HMAs. This alternative was dismissed from detailed study for the following reasons: (1) Field Darting would only allow the decrease of population through attrition which could take decades. (2) the size of the area at 475,100 acres is too large to use this method; (3) a portion of the area is Wilderness Area/Wilderness Study Areas with no roads or access for miles to some of the water sources and areas where horses reside.; and (4) the presence of water sources on both private and public lands inside and outside the Herd Areas would make it almost impossible to restrict wild horse access to only water trap sites to the extent needed to effectively gather and remove the excess animals. For these reasons, this alternative was determined to not be an effective or feasible method for gathering wild horses from the Seaman and White River HA.

2.4.3 Control of Wild Horse Numbers by Natural Means

This alternative would use natural means, such as natural predation and weather, to control the wild horse population. This alternative was eliminated from further consideration because it would be contrary to the WFRHBA which requires the BLM to protect the range from deterioration associated with an overpopulation of wild horses. The alternative of using natural controls to achieve a desirable AML has not been shown to be feasible in the past. Wild horse populations in the Seaman and White River HAs are not substantially regulated by predators, as evidenced by the 15-25% annual increase in the wild horse populations. In addition, wild horses are a long-lived species with documented foal survival rates exceeding 95% and are not a self-regulating species. This alternative would allow for a steady increase in the wild horse populations which would continue to exceed the carrying capacity of the range and would cause

increasing damage to the rangelands until severe range degradation or natural conditions that occur periodically – such as blizzards or extreme drought – cause a catastrophic mortality of wild horses in the HA.

2.4.4 Raising the Appropriate Management Levels for Wild Horses
An in-depth analysis was conducted through the 2007 EIS/2008 approved Ely District RMP finding that these HAs are not suited for long-term management of wild horses due to inadequate habitat to sustain and mange for healthy wild horses.

2.4.5 Remove or Reduce Livestock within the Seaman and White River HA
This alternative would involve no removal of wild horses and would instead address the excess wild horse numbers through the removal of livestock or reductions in livestock grazing allocations within the Seaman and White River HA. This alternative was not brought forward for analysis because it would be inconsistent with the current land use plan. This gather document and subsequent Decision Record is not the appropriate mechanism for adjusting the authorized livestock use within the allotments associated with the Herd Areas in order to reallocate forage to wild horses.

The proposal to reduce livestock would not meet the purpose and need for action identified in Chapter 1.1 Purpose and Need for Action: "The purpose of the Proposed Action is to remove all excess wild horses from areas not designated for their long-term maintenance and to achieve and maintain a thriving natural ecological balance and multiple use relationship under Section 3(b) (2) of the 1971 Wild Free-Roaming Horses and Burros Act (WFRHBA) and Section 302(b) of the Federal Land Policy and Management Act of 1976 and is in conformance with the decision in the 2008 Ely RMP to return these areas to HA status. Implementation of the Proposed Action is also needed to improve watershed health, to make "significant progress towards achievement" of Mojave/Southern Great Basin Resource Advisory Council (RAC) Standards for rangeland health."

This alternative would also be inconsistent with the WFRHBA, which directs the Secretary to immediately remove excess wild horses. Livestock grazing can only be reduced or eliminated if BLM follows regulations at 43 CFR § 4100 and must be consistent with multiple use allocations set forth in the land-use plan. Such changes to livestock grazing cannot be made through a wild horse gather decision, and are only possible if BLM first revises the land-use plans to re-allocate livestock forage to wild horses and to eliminate or reduce livestock grazing.

Furthermore, re-allocation of livestock AUMs to increase the wild horse AMLs would not achieve a thriving natural ecological balance due to differences in how wild horses and livestock graze. Unlike livestock which can be confined to specific pastures, limited periods of use, and specific seasons-of-use so as to minimize impacts to vegetation during the critical growing season or to riparian zones during the summer months, wild horses are present year-round and their impacts to rangeland resources cannot be controlled through establishment of a grazing system, such as for livestock. Thus, impacts from wild horses can only be addressed by limiting their numbers to a level that does not adversely impact rangeland resources and other multiple uses.

While the BLM is authorized to remove livestock from HAs "if necessary to provide habitat for wild horses or burros, to implement herd management actions, or to protect wild horses or burros from disease, harassment or injury" (43 CFR§ 4710.5), this authority is usually applied in cases of emergency and not for general management of wild horses since it cannot be applied in a manner that would be inconsistent with the existing land-use plans. (43 CFR § 4710.1)

For the reasons stated above, this alternative was dropped from detailed analysis. For modifications in long-term multiple use management, changes in forage allocations between livestock and wild horses would have to be re-evaluated and implemented through the appropriate public decision-making processes to determine whether a thriving natural ecological balance can be achieved at a higher AML and in order to modify the current multiple use relationship established in the land-use plans.

2.4.6 Make Individualized Excess Wild Horse Determinations Prior to Removal

An alternative whereby BLM would make on-the-ground and individualized excess wild horse determinations prior to removal of wild horses from any HMA has been advocated by some members of the public. Under the view set forth in some comments during public commenting for wild horse gathers nationwide, a tiered or phased removal of wild horses from the range is mandated by the WFRHBA. Specifically, this alternative would involve a tiered gather approach, whereby BLM would first identify and remove old, sick or lame animals in order to euthanize those animals on the range prior to gather. Second, BLM would identify and remove wild horses for which adoption demand exists, e.g., younger wild horses or wild horses with unusual and interesting markings. Under the WFRHBA(1333(b)(2)(iv)(C)), BLM would then destroy any additional excess wild horses for which adoption demand does not exist in the most humane and cost effective manner possible, although euthanasia has been limited by Congressional appropriations.

This proposed alternative could be viable in situations where the project area is contained, the area is readily accessible and wild horses are clearly visible, and where the number of wild horses to be removed is so small that a targeted approach to removal can be implemented. However, under the conditions present within the gather area and the significant number of excess wild horses both inside and outside of the Herd Areas, this proposed alternative is impractical, if not impossible, as well as less humane for a variety of reasons.

First, BLM does euthanize old, sick or lame animals on the range when such animals have been identified. This occurs on an on-going basis and is not limited to wild horse gathers. During a gather, if old, sick or lame animals are found and it is clear that an animal's condition requires the animal to be put down, that animal is separated from the rest of the group that is being herded so that it can be euthanized on the range. However, wild horses that meet the criteria for humane destruction because they are old, sick or lame usually cannot be identified as such until they have been gathered and examined up close, e.g., so as to determine whether the wild horses have lost all their teeth or are club footed. Old, sick and lame wild horses meeting the criteria for humane euthanasia are also only a small fraction of the total number of wild horses to be gathered, comprising on average about 0.5% of gathered wild horses. Thus, in a gather of over 1,000 wild horses, potentially about five of the gathered wild horses might meet the criteria for humane destruction over an area of over three quarters of a million acres.

Due to the size of the gather area, access limitations associated with topographic and terrain features and the challenges of approaching wild horses close enough to make an individualized determination of whether a wild horse is old, sick or lame, it would be virtually impossible to conduct a phased culling of such wild horses on the range without actually gathering and examining the wild horses. Similarly, rounding up and removing wild horses for which an adoption demand exists, before gathering any other excess wild horses, would be both impractical and much more disruptive and traumatic for the animals. Recent gathers have had success in adopting out approximately 30% of excess wild horses removed from the range on an annual basis. The size of the gather area, terrain challenges, difficulties of approaching the wild horses

close enough to determine age and whether they have characteristics (such as color or markings) that make them more adoptable, the impracticalities inherent in attempting to separate the small number of adoptable wild horses from the rest of the herd, and the impacts to the wild horses from the closer contact necessary, makes such phased removal a much less desirable method for gathering excess wild horses. This approach would create a significantly higher level of disruption for the wild horses on the range and would also make it much more difficult to gather the remaining excess wild horses.

Making a determination of excess as to a specific wild horse under this alternative, and then successfully gathering that individual wild horse would be impractical to implement (if not impossible) due to the size of the gather area, terrain challenges and difficulties approaching the wild horses close enough to make an individualized determination. This tiered approach would also be extremely disruptive to the wild horses due to repeated culling and gather activities over a short period of time. Gathering excess wild horses under this alternative would greatly increase the potential stress placed on the animals due to repeated attempts to capture specific animals and not others in the band. This in turn would increase the potential for injury, separation of mare/foal pairs, and possible mortality.

This alternative would be impractical to implement (if not impossible), would be cost-prohibitive, and would be unlikely to result in the successful removal of excess wild horses or application of population controls to released wild horses. This approach would also be less humane and more disruptive and traumatic for the wild horses. This alternative was therefore eliminated from any further consideration.

2.4.8 Use of Alternative Capture Techniques Instead of Helicopter Capture

An alternative using capture methods other than helicopters to gather excess wild horses has been suggested by some members of the public. As no specific alternative methods were suggested, the BLM identified chemical immobilization, net gunning, and wrangler/horseback drive trapping as potential methods for gathering wild horses. Net gunning techniques normally used to capture big game animals also rely on helicopters. Chemical immobilization is a very specialized technique and strictly regulated. Currently the BLM does not have sufficient expertise to implement either of these methods and it would be impractical to use given the size of the project area, access limitations, and difficulties in approachability of the wild horses.

Use of wrangler on horseback drive-trapping to remove excess wild horses can be fairly effective on a small scale. However, given the number of excess wild horses to be removed, the large geographic size of the Seaman and White River gather area, access limitations, and difficulties in approaching the wild horses this technique would be ineffective and impractical. Horseback drive-trapping is also very labor intensive and can be very dangerous to the domestic horses and the wranglers used to herd the wild horses. Domestic horses can easily be injured while covering rough terrain and the wrangler could be injured if he/she falls off. For these reasons, this alternative was eliminated from further consideration.

3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL EFFECTS

3.1 General Setting

The Seaman HA ranges in elevation from approximately 8,650 feet above sea level (asl) to approximately 5,000 feet asl. The annual average precipitation varies from 17 inches at the higher elevation to 7 inches or less at the lower elevations. The area lies approximately 35 miles south of Lund, Nevada and 80 miles southwest of Ely, Nevada, and is within Nye and Lincoln Counties. The HA is 358,800 acres and is dominated by sagebrush and pinyon-juniper with topography ranging from wide open valley bottoms to surrounding gently sloping hills to steep escarpments. Wild horses routinely travel up to seven miles outside the HAs in search of water and summer habitat at higher elevations of the Grant Range during the summer.

The White River HA ranges in elevation from approximately 8,710 above asl to approximately 5,500 feet asl. The annual average precipitation varies from 20 inches at the higher elevations to 8 inches or less at the lower elevations. The area lies approximately 20 air miles southwest of Lund, Nevada, Nye County. The HA is 116,300 acres and is dominated by sagebrush and pinyon-juniper with topography ranging from wide open valley bottoms to surrounding gently sloping hills to steep escarpments. Wild horses routinely travel up to three miles outside the HA in search of water throughout the summer months.

1.5 Identification of Issues:

Internal scoping was conducted by an interdisciplinary (ID) team on September 5, 2017, that analyzed the potential consequences of the Proposed Action. Potential impacts to the following resources/concerns were evaluated in accordance with criteria listed in the H-1790-1 NEPA Handbook (2008) page 41, to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	There would be temporary increased particulate matter (dust) resulting from the Proposed Action. The affected area is not within an area of non-attainment or areas where total suspended particulates or other criteria pollutants exceed Nevada air quality standards. Direct, indirect or cumulative impacts do not approach a level of significance. Detailed analysis is not required.
Areas of Critical Environmental Concern (ACEC)	Y	Analyzed in Chapter 3 due to potential impacts.
Cultural Resources	N	Trap sites and temporary holding facilities would be located in previously used sites or other disturbed areas whenever possible. Undisturbed areas identified as potential trap sites/holding facilities/ancillary facilities would be inventoried for cultural resources (Class III standards) by a

		district archaeological technician or archaeologist. All cultural resources will be avoided by project re-design. A cultural resource needs assessment was completed for this project (8111NANV040FY17-061). The White River HA contains 19 eligible sites, the Golden Gate HA contains 19 eligible sites, and the Seaman HA contains 6 eligible sites. These historic property locations have been reviewed with the wild horse & burro specialist and will be avoided during this project.
Paleontological Resources	N	Currently there are is one isolated resource within the White River HA. Iit will be avoided during this project due to its location within the Riordan's Well Wilderness Study Area. Any newly discovered resources during this project will be avoided by project redesign.
Forest Health	N	Project does not meet HFRA criteria.
Migratory Birds	N	Proposed Action would be planned to occur outside of Migratory Bird nesting season.
Rangeland Standards and Guidelines	N	Beneficial impacts to rangeland standards and health are consistent with the need and objectives for the Proposed Action. No detailed analyses necessary.
Native American Religious and other Concerns	N	No potential traditional religious or cultural sites of importance have been identified in the project according to the Ely District RMP Ethnographic report (2003).
Wastes, Hazardous or Solid	N	No hazardous or solid wastes exist on the permit renewal area, nor would any be introduced.
Water Quality, Drinking/Ground	N	No affects to water quality are expected. Project would avoid spring riparian, and stream locations.
Environmental Justice	N	No environmental justice issues are present at or near the project.
Floodplains	N	No floodplains have been identified by HUD or FEMA within the project area. Floodplains as defined in Executive Order 11988 may exist in the area, but would not be affected by the Proposed Action.
Farmlands, Prime and Unique	N	There are soils within both herd areas that have been designated by the Natural Resource Conservation Service as meeting the requirements to be considered prime farmlands. Localized trampling of these soils may occur at the trap sites. The propose action will not contribute either directly or indirectly to loss of these potential farmlands. The effects would be minimal and would not directly or indirectly approach any level of significance, no further analysis is necessary.
Threatened and Endangered Species	N	Not present.
Wetlands/Riparian Zones	Y	Analyzed in Chapter 3 due to potential impacts.
Non-native Invasive and Noxious Species	Y	Analyzed in Chapter 3 due to potential impacts.

Wilderness/WSA	Y	Analyzed in Chapter 3 due to potential impacts.
National Monument	Y	Analyzed in Chapter 3 due to potential impacts.
Human Health and Safety	N	No Herbicides would be used during implementation of the Proposed Action
Wild and Scenic Rivers	N	Resource notPresent
Special Status Animal Species, other than those listed or proposed by the FWS as threatened or Endangered.	Y	Analyzed in Chapter 3 due to potential impacts.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered. Also, ACECs designated to protect special status plant species.	Y	Analyzed in Chapter 3 due to potential impacts.
Fish and Wildlife	Y	Analyzed in Chapter 3 due to potential impacts.
Wild Horses	Y	Analyzed in Chapter 3 due to potential impacts.
Soils/Watershed	N	Project implementation during dry soil conditions combined with the relative small areas used for gathering and holding operations are not expected to adversely impact soil or hydrologic function.
Livestock Grazing	Y	Analyzed in Chapter 3 due to potential impacts.
Water Resources (Water Rights)	N	No adverse effects to water resources or water rights are expected. Project would avoid spring, riparian, and stream locations.
Mineral Resources	N	There would be no modifications to mineral resources through the Proposed Action.
Vegetative Resources	Y	Analyzed in Chapter 3 due to potential impacts.

3.2 Resources/Concerns Analyzed

3.2.1 Wild Horses

3.2.1.1 Affected Environment

In 2008, BLM issued Ely District ROD and Approved Resource Management Plan. The Ely District ROD/Approved RMP management action WH-5 states: "Remove wild horses and drop herd management area status for those … as listed in Table 13." Seaman and White River were dropped from HMA status and returned to HA status (manage "0" wild horses) with this management action. The management action to achieve 0 wild horses within the combined Golden Gate HA and Seaman Range HA (Seaman HMA) as well as White River HA reflect the recent evaluation based on multi-tiered analysis from the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) table 3.8-2 and page 4.8-2. The EIS (November 2007) evaluated each herd management area for five essential habitat components and herd characteristics: forage, water, cover, space, and reproductive viability. If

one or more of these components were missing, or there was no potential for a stable shared genetic pool, the herd management area was considered unsuitable. The combined Golden Gate HA and Seaman Range HA as well as White River HA have inadequate forage, marginal to very little water on public lands, and inadequate reproductive viability. The combined Golden Gate and Seaman Range HA also has no summer habitat and inadequate cover.

At the present time, an estimated 365 wild horses are present within the HAs. Moderate to heavy utilization of key forage species by use pattern mapping and key areas together with trampling/trailing, bare ground, and limited water is contributing to rangeland damage and preventing attainment of rangeland health standards. Wild horses in the three HAs are thin to moderately thin stage or a body condition score (BCS) class 3-4 on the Henneke BCS chart. Most of the foal crops from these HAs are absent and the mares are on the lower end of the class 3 BCS. The bands sizes are generally groups of 10-18 with a few exceptions of singles and several larger groups where more than one band has overlapping home areas.

Heavy utilization of key grass (Indian Ricegrass, Needle and Thread) by wild horses in the White River Herd Area (March 2017).

3.2.1.2 Environmental Effects

Effects of Alternative A -- Proposed Action

The Proposed Action is to achieve zero (0) wild horses within the Seaman and White River HA and surrounding areas within 10 years. The initial gather of the Proposed Action would be to gather approximately 100 percent of the total wild horse population and remove excess wild horses. However, due to terrain and anticipated gather efficiency, the post-gather population of wild horses would be about 27-37 animals. More than one gather would likely be needed to remove all of the wild horses within the three areas and effectively return the areas to HA status.

Helicopter/ Bait and water trap impacts to wild horses

Indirect impacts can occur to horses after the initial stress event and could include increased social displacement or increased conflict between studs. These impacts are known to occur intermittently during wild horse gather operations. Traumatic injuries could occur and typically involve biting and /or kicking bruises. Horses may potentially strike or kick gates, panels or the working chute while in corrals or trap which may cause injuries. Lowered competition for forage and water resources would reduce stress and fighting for limited resources (water and forage) and promote healthier animals. Indirect individual impacts are those impacts which occur to individual wild horses after the initial stress event, and may include spontaneous abortions in mares. These impacts, like direct individual impacts, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief skirmish which occurs among studs following sorting and release into the stud pen, which lasts less than a few minutes and ends when one stud retreats. Traumatic injuries usually do not result from these conflicts. These injuries typically involve a bite and/or kicking with bruises which don't break the skin. Like direct individual impacts, the frequency of occurrence of these impacts among a population varies with the individual animal.

Spontaneous abortion events among pregnant mares following capture is also rare, though poor body condition at time of gather can increase the incidence of spontaneous abortions. Given the two different capture methods proposed, spontaneous abortion is not considered to be an issue for either of the two proposed projects, since helicopter/drive trap method would not be utilized during peak foaling season (March 1 thru June 30), unless an emergency exists, and the water/bait trapping method is anticipated to be low stress.

Foals are often gathered that were orphaned on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor, unthrifty condition. Orphans encountered during gathers are cared for promptly and rarely die or have to be euthanized. It is unlikely that orphan foals would be encountered since majority of the foals would be old enough to travel with the group of wild horses. Also depending on the time of year the current foal crop would be six to nine months of age and may have already been weaned by their mothers.

Gathering wild horses during the summer months can potentially cause heat stress. Gathering wild horses during the fall/winter months reduces risk of heat stress, although this can occur during any gather, especially in older or weaker animals. Adherence to the SOPs and techniques used by the gather contractor or BLM staff will help minimize the risks of heat stress. Heat stress does not occur often, but if it does, death can result. Most temperature related issues during a gather can be mitigated by adjusting daily gather times to avoid the extreme hot or cold periods of the day. The BLM and the contractor would be pro-active in controlling dust in and around the holding facility and the gather corrals to limit the horses' exposure to dust.

The BLM has been gathering excess wild horses from public lands since 1975, and has been using helicopters for such gathers since the late 1970's. Refer to Appendix I for information on the methods that are utilized to reduce injury or stress to wild horses and burros during gathers.

Since 2006, BLM Nevada has gathered over 40,000 excess animals. Of these, gather related mortality has averaged only 0.5%, which is very low when handling wild animals. Another 0.6% of the animals captured were humanely euthanized due to pre-existing conditions and in accordance with BLM policy. This data affirms that the use of helicopters and motorized vehicles are a safe, humane, effective and practical means for gathering and removing excess wild horses and burros from the range. BLM policy prohibits gathering wild horses with a helicopter (unless

under emergency conditions) during the period of March 1 to June 30 which includes and covers the six weeks that precede and follow the peak of foaling period (mid-April to mid-May).

Through the capture and sorting process, wild horses are examined for health, injury and other defects. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. BLM Euthanasia Policy WO IM 2015-070 is used as a guide to determine if animals meet the criteria and should be euthanized. Animals that are euthanized for non-gather related reasons include those with old injuries (broken hip, leg) that have caused the animal to suffer from pain or which prevent them from being able to travel or maintain body condition: old animals that have lived a successful life on the range, but now have few teeth remaining, are in poor body condition, or are weak from old age; and wild horses that have congenital (genetic) or serious physical defects such as club foot, or sway back and should not be returned to the range.

Temporary Holding Facilities During Gathers
Wild horses gathered would be transported from the trap sites to a temporary holding corral within the HA in goose-neck trailers or straight-deck semi-tractor trailers. At the temporary holding corral, the wild horses will be aged and sorted into different pens based on sex. The horses will be provided ample supply of good quality hay and water. Mares and their un-weaned foals will be kept in pens together. All horses identified for retention in the HMA will be penned separately from those animals identified for removal as excess.

At the temporary holding facility, a veterinarian, will provide recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) would be humanely euthanized using methods acceptable to the American Veterinary Medical Association (AVMA).

Transport, Short Term Holding, and Adoption Preparation
Wild horses removed from the range as excess would be transported to the receiving short-term holding facility in a goose-neck stock trailer or straight-deck semi-tractor trailers. Trucks and trailers used to haul the wild horses will be inspected prior to use to ensure wild horses can be safely transported and that the interior of the vehicle is in a sanitary condition. Wild horses will be segregated by age and sex when possible and loaded into separate compartments. Mares and their un-weaned foals may be shipped together. Transportation of recently captured wild horses is limited to a maximum of 8 hours. During transport, potential impacts to individual horses can include stress, as well as slipping, falling, kicking, biting, or being stepped on by another animal. Unless wild horses are in extremely poor condition, it is rare for an animal to die during transport.

Upon arrival, recently captured wild horses are off-loaded by compartment and placed in holding pens where they are fed good quality hay and water. Most wild horses begin to eat and drink immediately and adjust rapidly to their new situation. At the short-term holding facility, a veterinarian provides recommendations to the BLM regarding care, treatment, and if necessary, euthanasia of the recently captured wild horses. Any animals affected by a chronic or incurable disease, injury, lameness or serious physical defect (such as severe tooth loss or wear, club foot, and other severe congenital abnormalities) that was not diagnosed previously at the temporary holding corrals at the gather site would be humanely euthanized using methods acceptable to the AVMA. Wild horses in very thin condition or animals with injuries are sorted and placed in hospital pens, fed separately and/or treated for their injuries. Recently captured wild horses,

generally mares, in very thin condition may have difficulty transitioning to feed. A small percentage of animals can die during this transition; however, some of these animals are in such poor condition that it is unlikely they would have survived if left on the range.

After recently captured wild horses have transitioned to their new environment, they are prepared for adoption or sale. Preparation involves freeze-marking the animals with a unique identification number, vaccination against common diseases, castration, and de-worming. During the preparation process, potential impacts to wild horses are similar to those that can occur during transport. Injury or mortality during the preparation process is low, but can occur.

At short-term corral facilities, a minimum of 700 square feet is provided per animal. Mortality at short-term holding facilities averages approximately 5% (GAO-09-77, Page 51), and includes animals euthanized due to a pre-existing condition, animals in extremely poor condition, animals that are injured and would not recover, animals which are unable to transition to feed; and animals which die accidentally during sorting, handling, or preparation.

Adoption
Adoption applicants are required to have at least a 400 square foot corral with panels that are at least six feet tall. Applicants are required to provide adequate shelter, feed, and water. The BLM retains title to the horse for one year and the horse and facilities are inspected. After one year, the applicant may take title to the horse at which point the horse become the property of the applicant. Adoptions are conducted in accordance with 43 CFR § Subpart 4750.

Sale with Limitation
Buyers must fill out an application and be pre-approved before they may buy a wild horse. A sale-eligible wild horse is any animal that is more than 10 years old; or has been offered unsuccessfully for adoption at least 3 times. The application also specifies that all buyers are not to sell to slaughter buyers or anyone who would sell the animals to a commercial processing plant. Sale of wild horses are conducted in accordance with the 1971 WFRHBA and congressional limitations.

Off-range Pastures
During the past 5 years, the BLM has removed approximately 19,000 excess wild horses or burros from the Western States. Most animals not immediately adopted or sold have been transported to Off-Range pastures in the Midwest given current Congressional prohibitions on selling excess animals without limitations, or on euthanizing healthy animals for which no adoption or sale demand exists as required by the WFRHBA.

Potential impacts to wild horses from transport to adoption, sale or Off-range Pastures (ORP) are similar to those previously described. One difference is that when shipping wild horses for adoption, sale or ORP, animals may be transported for a maximum of 24 hours. Immediately prior to transportation, and after every 24 hours of transportation, animals are offloaded and provided a minimum of 8 hours on-the-ground rest. During the rest period, each animal is provided access to unlimited amounts of clean water and 2 pounds of good quality hay per 100 pounds of body weight with adequate bunk space to allow all animals to eat at one time. The rest period may be waived in situations where the anticipated travel time exceeds the 24-hour limit but the stress of offloading and reloading is likely to be greater to the animals than the stress involved in the additional

period of uninterrupted travel.

Off-range pastures are designed to provide excess wild horses with humane, and in some cases life-long care in a natural setting off the public rangelands. There wild horses are maintained in grassland pastures large enough to allow free-roaming behavior (i.e., the horses are not kept in corrals) and with the forage, water, and shelter necessary to sustain them in good condition. About 33,429 wild horses that are in excess of the current adoption or sale demand (because of age or other factors such as economic recession), are currently located on private land pastures in Oklahoma, Kansas, and South Dakota, Iowa, Missouri, Montana, and Utah. Establishment of an ORP is subject to a separate NEPA and decision-making process. Located in mid or tall grass prairie regions of the United States, these ORPs are highly productive grasslands compared to the more arid western rangelands. These pastures comprise about 256,000 acres (an average of about 10-11 acres per animal). Of the animals currently located in ORP, less than one percent is age 0-4 years, 49 percent are age 5-10 years, and about 51 percent are age 11+ years.

Mares and sterilized stallions (geldings) are segregated into separate pastures except at one facility where geldings and mares coexist. Although the animals are placed in ORP, they remain available for adoption or sale to qualified individuals; and foals born to pregnant mares in ORP are gathered and weaned when they reach about 8-12 months of age and are also made available for adoption. The ORP contracts specify the care that wild horses must receive to ensure they remain healthy and well-cared for. Handling by humans is minimized to the extent possible, although regular on-the-ground observation by the ORP contractor and periodic counts of the wild horses to ascertain their well-being and safety are conducted by BLM personnel and/or veterinarians. A very small percentage of the animals may be humanely euthanized if they are in very poor condition due to age or other factors. Natural mortality of wild horses in ORP averages approximately 8% per year, but can be higher or lower depending on the average age of the horses pastured there (GAO-09-77, Page 52). Wild horses residing on ORP facilities live longer, on the average, than wild horses residing on public rangelands,

Euthanasia and Sale Without Limitation

Under the WFRHBA, healthy excess wild horses can be euthanized or sold without limitation if there is no adoption demand for the animals. However, while euthanasia and sale without limitation are allowed under the statute, these activities have not been permitted under current Congressional appropriations for over a decade and are consequently inconsistent with BLM policy. If Congress should remove this prohibition, then excess horses removed from the HMA could potentially be sold without limitations or humanely euthanized, as required by statute, if no adoption or sale demand exists for some of the removed excess horses.

Wild Horses Remaining Following Gather

The wild horses that are not captured may be temporarily disturbed and move into another area during the gather operations. With the exception of changes to herd demographics, direct population wide impacts have proven, over the last 20 years, to be temporary in nature with most if not all impacts disappearing within hours to several days. No observable effects associated with

these impacts would be expected within one month of release, except for a heightened awareness of human presence.

As a result of lower density of wild horses across the HAs following the removal of excess horses, competition for resources would be reduced, allowing wild horses to utilize preferred, quality habitat. Confrontations between stallions would also become less frequent, as would fighting among wild horse bands at water sources. Achieving the AML and improving the overall health and fitness of wild horses could also increase foaling rates and foaling survival rates over the current conditions.

The primary effects to the wild horse population that would be directly related to this proposed gather would be to herd population dynamics, age structure or sex ratio, and subsequently to the growth rates and population size over time.

The remaining wild horses not captured would maintain their social structure and herd demographics (age and sex ratios). No observable effects to the remaining population associated with the gather impacts would be expected except a heightened shyness toward human contact.

Impacts to the rangeland as a result of the current overpopulation of wild horses would be reduced under the Proposed Action. Fighting among stud horses would decrease since they would protect their position at water sources less frequently; injuries and death to all age classes of animals would also be expected to be reduced as competition for limited forage and water resources is decreased.

Indirect individual impacts are those impacts which occur to individual wild horses after the initial stress event, and may include spontaneous abortions in mares, and increased social displacement and conflict in studs. These impacts, like direct individual impacts, are known to occur intermittently during wild horse gather operations. An example of an indirect individual impact would be the brief skirmish which occurs among older studs following sorting and release into the stud pen, which lasts less than two minutes and ends when one stud retreats. Traumatic injuries usually do not result from these conflicts. These injuries typically involve a bite and/or kicking with bruises which don't break the skin. Like direct individual impacts, the frequency of occurrence of these impacts among a population varies with the individual animal.

Spontaneous abortion events among pregnant mares following capture is also rare, though poor body condition can increase the incidence of such spontaneous abortions. Given the timing of this gather, spontaneous abortion is not considered to be an issue for the proposed gather.

A few foals may be orphaned during gathers. This may occur due to:

- The mare rejects the foal. This occurs most often with young mothers or very young foals,
- The foal and mother become separated during sorting, and cannot be matched,
- The mare dies or must be humanely euthanized during the gather,
- The foal is ill, weak, or needs immediate special care that requires removal from the mother,
- The mother does not produce enough milk to support the foal.

Oftentimes, foals are gathered that were already orphans on the range (prior to the gather) because the mother rejected it or died. These foals are usually in poor, unthrifty condition.

Orphans encountered during gathers are cared for promptly and rarely die or have to be euthanized.

Most foals that would be gathered would be over four months of age and some would be already weaned from their mothers. In private industry, domestic horses are normally weaned between four and six months of age.

Gathering the wild horses during the fall reduces risk of heat stress, although this can occur during any gather, regardless of season, especially in older or weaker animals. Adherence to the SOPs as well and techniques used by the gather contractor help minimize the risks of heat stress. Heat stress does not occur often, but if it does, death can result.

During summer gathers, roads and corrals may become dusty, depending upon the soils and specific conditions at the gather area. The BLM ensures that contractors mitigate any potential impacts from dust by slowing speeds on dusty roads and watering down corrals and alleyways. Despite precautions, it is possible for some animals to develop complications from dust inhalation and contract dust pneumonia. This is rare, and usually affects animals that are already weak or otherwise debilitated due to older age or poor body condition. Summer gathers pose increased risk of heat stress so Contractors use techniques that minimize heat stress, such as conducting gather activities in the early morning, when temperatures are coolest, and stopping well before the hottest period of the day. The helicopter pilot also brings in the horses at an easy pace. If there are extreme heat conditions, gather activities are suspended during that time. Water consumption is monitored, and horses or burros are often lightly sprayed with water as the corrals are being sprayed to reduce dust. The wild horses and burros appear to enjoy the cool spray during summer gathers. Individual animals are also monitored and veterinary or supportive care administered as needed. Electrolytes can be administered to the drinking water during gathers that involve animals in weakened conditions or during summer gathers. Additionally, BLM Wild Horse and Burro staff maintains supplies of electrolyte paste if needed to directly administer to an affected animal. As a result of adherence to SOPs and care taken during summer gathers, potential risks to wild horses associated with summer gathers can be minimized or eliminated.

During winter gathers, wild horses and burros are often located in lower elevations, in less steep terrain due to snow cover in the higher elevations. Subsequently, the animals are closer to the potential gather corrals, and need to maneuver less difficult terrain in many cases. However, snow cover can increase fatigue and stress during winter gathers, therefore the helicopter pilot allows horses to travel slowly at their own pace. The Contractor may plow trails in the snow leading to the gather corrals to make it easier for animals to travel to the gather site and to ensure the wild horses can be safely gathered.

Through the capture and sorting process, wild horses are examined for health, injury and other defects. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy. Animal, Health, Maintenance Evaluation and Response WO IM-2015-070 is used as a guide to determine if animals meet the criteria and should be euthanized (refer to SOPs Appendix I). Animals that are euthanized for non-gather related reasons include those with old injuries (broken hip, leg) that have caused the animal to suffer from pain or which prevent them from being able to travel or maintain body condition; old animals that have lived a successful life on the range, but now have few teeth remaining, are in poor body condition, or are weak from old age; and wild horses that have congenital (genetic) or serious physical defects such as club foot, or sway back and should not be returned to the range.

Effects of Alternative B -- No Action Alternative
Under the No Action Alternative, wild horses would not be removed from the Seaman and White River HAs at this time. Individual horses as well as the herd would not be subject to any individual direct or indirect impacts which may result during a gather operation as described for the Proposed Action. However, the current population of about 365 wild horses would continue to increase at rates of 20% annually and would be allowed to regulate their numbers naturally through predation, disease, forage, water, and space availability. As populations increase beyond the capacity of the available habitat, more bands of wild horses would leave the boundaries of the Herd Areas in search of forage and water. This alternative would result in increasing numbers of wild horses residing in areas not designated for their use. Existing management, including monitoring, would continue.

The BLM would be out of conformance with the Ely District ROD and Approved RMP (August 2008) at Management Action WH-5.

The No Action Alternative would not comply with the 1971 WFRHBA or with applicable regulations and Bureau policy, nor would it comply with the Mojave/Southern Great Basin RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro populations. This Alternative would not achieve the stated objectives for wild horses, to "prevent the range from deterioration associated with overpopulation", "preserve and maintain a thriving natural ecological balance and multiple use relationship in that area", and "limiting animal's distribution to herd areas". However, it is included as a baseline for comparison with the Proposed Action, as required under the 1969 National Environmental Policy Act (NEPA)

3.2.2 Riparian/Wetland Areas

3.2.2.1 Affected Environment
There are no seeps or springs that occur within the northern portion of the Seaman HA. Small riparian areas and their associated plant species occur within the Seaman Range and White River HAs near seeps, springs, and along sections of perennial drainages. Hoof action impacts from wild horses have resulted in a loss of riparian habitat surrounding spring sources. This type of disturbance combined with reduced vegetative cover is frequently associated with increased bank erosion due to high flows.

3.2.2.2 Environmental Effects
Effects of Alternative A -- Proposed Action
Because temporary trap sites and holding facilities would not be located within riparian areas, riparian areas would improve with the reduced population, which would lead to healthier, more vigorous vegetative communities. Hoof action on the soil around unimproved springs and stream banks would be lessened which would lead to increased stream bank stability. Improved vegetation around riparian areas would dissipate stream energy associated with high flows, and filter sediment that would result in some associated improvements in water quality. The Proposed Action would make progress towards achieving and maintaining proper functioning condition at riparian areas.

Effects of Alternative B -- No Action Alternative

Wild horse populations would continue to grow. Increased wild horse use throughout the Seaman, White River HAs, and outside HAs would adversely impact riparian resources and their associated surface waters. As native plant health deteriorates and plants are lost, soil erosion would increase. This alternative would not make progress towards achieving and maintaining a thriving natural ecological balance and proper functioning condition at riparian areas.

3.2.3 Fish and Wildlife

3.2.3.1 Affected Environment

The Seaman and White River HAs provide habitat for a wide variety of wildlife such as big game, fur-bearers, small mammals, reptiles and birds. Rocky mountain elk winter range occurs in in the northern end of the White River HA. Mule deer winter range occurs in portions of the all three heard areas, along with crucial winter range. Pronghorn habitat occurs throughout the HAs in the lower elevations.

Other mammals that inhabit the HAs include mountain lions, bobcats, jackrabbits, cottontails, and kangaroo mice. Reptile species include desert horned lizard, long-nosed leopard lizard, western fence lizard, Great Basin collared lizard, Great Basin rattlesnake and Mojave Desert sidewinder.

Studies have shown wild horses influence on the use of water by communities of native wildlife in a semi-arid environment. The study illustrated that horses displaced native species from access to water in a semi-arid environment. (Lucas K. Hall et al., 2016). Also that native species tended to avoid times when horses were present at water sources, providing some indirect evidence for interference competition, similar to what has been observed for interactions between bighorns (Ovis Canadensis) and feral horses (Ostermann Kelm et al., 2008). There were only a few instances detected where native species and horses simultaneously occurred at the same water source. This observation could result from one or several of the following reasons: 1) large body size can confer a competitive advantage (Berger, 1977; Robertson, 1998; Palomares and Caro, 199), 2) frequent physical intraspecific disputes among horses may deter other species from approaching (Berger, 1977; Stevens, 1988), and 3) the sheer number of horses at nearly all of the available space for drinking.

Competition from a large dominant species may drive niche partitioning of other species (Carothers and Jaksi, 1984; Ziv et al., 1993; Schuette et al., 2013). The study found that during times of greatest physiological stress (increased temperature, decreased precipitation), horses monopolized access to water sources where they were present up to 73% of the day, leaving limited time for other species. The potential for an exotic species, such as the horses, to outcompete native species for a limited communal resource during peak need raises concern for native communities in water-limited environments (LK. Hall et al. 2016)

3.2.3.2 Environmental Effects

Effects of Alternative A – Proposed Action

Wildlife may be disturbed during gather operations when the helicopter flies over looking for horses. Once the helicopter is gone these animals should return to normal activities. Small burrowing animals and other slower moving wildlife may be killed in trapping areas, however this impact is minimal and this loss would not cause population changing impacts to species.

Removing all excess wild horses from the Seaman and White River HAs would result in improved habitat conditions for all wildlife by increasing herbaceous vegetative cover in the uplands and improving riparian vegetation and water quality at and around springs and seeps.

Additionally, there would be reduced competition between horses and wildlife at water sources throughout the HAs.

Effects of Alternative B – No Action Alternative
Under the No Action (no removal) alternative, wildlife would not be temporarily displaced or disturbed during the gather period. However, as wild horse numbers continue to grow, competition between wild horses and wildlife for limited water and forage resources would increase. As competition increases, some wildlife species may not be able to compete successfully, leading to increased stress, decreased productivity, decreased survival, and habitat displacement or death over the long-term.

3.2.4 Special Status Species

3.2.4.1 Affected Environment
Numerous BLM special status animal species are known to occur or have the potential to occur within the Seaman and White River HAs, either year round or during some portion of the year. Special status avian species include: Greater sage-grouse (*Centrocercus urophasianus*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), peregrine falcon (*Falco peregrinus*), western burrowing owl (*Athene cunicularia*), pinyon jay (*Gymnorhinus cyanocephalus*), loggerhead shrike (*Lanius ludovicianus*), sage thrasher (*Oreoscoptes montanus*), and Brewer's sparrow (*Spizella breweri*)). There was one observation of a banded Gila monster (*Heloderma suspectum cinctum*) in 1974 in the Kirch Wildlife Management Area. Additionally, numerous bat species would be roosting in caves, mine shafts, or trees and would be foraging throughout the HAs.

Greater sage-grouse General Habitat Management Area (GHMA) and Other Habitat Management Area (OHMA) exist in the HAs. There are no active or pending leks within the HAs; however Greater sage-grouse utilize certain areas for nesting, early brood-rearing, late brood-rearing, and winter habitat. Greater sage-grouse Required Design Features will be applied to the project, as well as not gathering during the nesting and early brood-rearing life-cycle periods.

Three BLM sensitive plant species have been documented within the HAs. These include currant milkvetch (*Astragalus uncialis*) within the White River HA, Tiehm's blazing star (*Mentzelia tiehmii*) within the Seaman Range HA, and Eastwood milkvetch (*Asclepias eastwoodiana*) in all three HAs.

3.2.4.2 Environmental Effects
Effects of Alternative A -- Proposed Action
Individual birds and other animals may be disturbed during gather operations when the helicopter flies over looking for horses. Once the helicopter is gone these animals should return to normal activities. Because trap sites and holding facilities would not be located where sensitive animal and plant species are known to occur, no effects to populations of special status species would occur as a result of gather operations.

Removing all excess wild horses from the Seaman and White River HAs would result in improved habitat conditions for all special status animal species by increasing herbaceous vegetative cover in the uplands and improving riparian vegetation and water quality at and around springs and seeps. This would particularly be beneficial to all life stages of the Greater sage-

grouse. Greater sage-grouse would not be disturbed during nesting and early brood-rearing; however gathers may occur during late-brood rearing or winter seasonal life-cycle periods. The horse gather would temporarily disturb grouse during these periods, however the benefits of the gather outweigh the short term disturbance from gathering horses. Sensitive plant species would be less likely to be grazed or trampled after removing all excess wild horses.

Effects of Alternative B -- No Action Alternative
Individual animals would not be disturbed or displaced because gather operations would not occur under the no action alternative. However, as wild horse numbers continued to grow, competition between wild horses and wildlife for limited water and forage resources would increase. As competition increases, some wildlife species may not be able to compete successfully leading to increased stress and possible dislocation or death of native wild life species over the long-term. Sensitive plant species would be more likely to be grazed and trampled under the no action alternative because there would be more wild horses within the HA boundaries.

3.2.5 Areas of Environmental Concern

3.2.5.1 Affected Environment
A portion of the White River Valley Area of Critical Environmental Concern (ACECs) overlaps with the Seaman HA. This ACEC was designated to protect sensitive plant species that inhabit specific areas in the White River Valley.

3.2.5.2 Environmental Effects
Effects of Alternative A -- Proposed Action
Gather and trapping activities would not directly occur within the White River Valley ACEC. Horses may flee into this area while the gather occurs, increasing potential trampling and grazing of sensitive plants. However over the long term, gathering horses in the ACEC will benefit the sensitive plants by reducing horse impacts to sensitive plants in the ACEC.

Effects of Alternative B -- No Action Alternative
Sensitive plants within the White River Valley ACEC would not be disturbed because gather operations would not occur under the no action alternative. Overall conditions within the ACEC would continue to deteriorate as wild horse numbers out of ecological balance reduce herbaceous vegetative cover. Sensitive plant species would be more likely to be grazed and trampled under the no action alternative because there would be more wild horses within the HA boundaries.

3.2.6 Wilderness and Wilderness Study Areas

3.2.6.1 Affected Environment
Weepah Spring Wilderness occurs within the Seaman HA and is characterized by a rugged landscape. The Seaman Range and Timber Mountain consist of individual peaks and a myriad of canyons sloping off the higher ground. Elevations range from 4,600 feet in the canyon bottoms to 8,605 feet at the top of the escarpment. Weepah Spring Wilderness is an excellent, unspoiled example of mountain ranges typical of the Great Basin. The complex geology of the area forms a complicated landscape: isolated peaks, wandering canyons, walls of fossil bearing rocks, natural arches and volcanic hoodoos. In addition the area includes the largest stand of ponderosa pine in eastern Nevada and 4,000 year old rock art.

Blue Eagle Wilderness Study Area (WSA) occurs within the White River HA and is characterized by rocky cliffs, deep, narrow canyons and a spectacular massively bedded limestone of Blue Eagle Mountain (elevation 9,561feet) creates a fortress plateau surrounded by sheer cliffs on three sides. Elevations range from 4,800 feet in the canyon bottoms to 9,561 feet at the top of the escarpment. This sky island is over 9,000 foot and supports a forest of white fir, ponderosa, limber, and bristlecone pine. Riordan's Well Wilderness Study Area (WSA) occurs within the White River HA and is characterized by extremely rugged with a maze of peaks, outcrops, and drainages which support a variety of conifer and wildlife species. Elevations range from 5,000 feet in the canyon bottoms to 9,562 feet on Heath Peak. Around Heath Peak white limestone cliffs provide a colorful contrast with the dark green forest canopy.

3.2.6.2 Environmental Effects

Effects of Alternative A -- Proposed Action

The Wilderness Act directs that wilderness areas be managed to provide for their protection, the preservation of their natural conditions, and the preservation of their wilderness character. Wild horse and burro management within wilderness is subject to the requirements of the Wilderness Act. Herd numbers and management techniques must not degrade and must be compatible with preservation of the area's wilderness character (BLM Manual 8560).

Federal Land Policy and Management Act of 1976 requires BLM to manage WSAs in a manner so as not to impair their suitability for preservation as wilderness. This is referred to as the non-impairment mandate. Under the Interim Management Plan (IMP) wild horse and burro populations must be managed at appropriate management levels to ensure a thriving natural ecological balance.

This Alternative would allow for wilderness and wilderness study areas to be managed as mandated and required. During gather operations, the helicopter may fly over portions of the wilderness or WSA looking for wild horses. These areas will be avoided for trap construction and landing of the helicopter. Flying in these areas will be minimized to ensure that wilderness qualities are not impaired.

Effects of Alternative B -- No Action Alternative

Under the No Action Alternative, wild horse populations would continue to exceed the productive capability of the Seaman and White River HAs; vegetation in riparian and uplands would continue to receive heavy to excessive utilization. This level of use would be expected to detract from the aesthetic values derived from wilderness or WSA characteristics.

3.2.7 National Monuments

3.2.7.1 Affected Environment

Portions of the Seaman HA are within the Basin and Range National Monument. The monument was designated in 2015 for objects of cultural, natural, and scientific interest as well as to ensure persistence of values identified in the Presidential Proclamation that established the area as a National Monument. Habitat for a variety of plant and animal species is identified in the proclamation. Basque and other ranchers have historically used this area for sheep and cattle grazing, and the ranching lifestyle is a value identified in the proclamation. Wild horses were not identified as an object or value in the proclamation.

3.2.7.2 Environmental Effects

Effects of Alternative A -- Proposed Action

The location of trap sites and temporary holding facilities in previously used sites or other disturbed areas whenever possible would avoid and minimize effects to monument objects and values. Undisturbed areas identified as potential trap sites or holding facilities would be inventoried for cultural resources. If cultural resources are encountered, these locations would not be used unless they could be modified to avoid impacts to cultural resources. Wildlife species listed in the proclamation may be disturbed or displaced during gather operations, however this disruption is anticipated to be temporary in nature. Removal of horses could decrease competition for resources between wild horses and livestock, which would assist with proper care and management of the ranching lifestyle value in the area. The Proposed Action and incorporated measures as described, would allow for proper care and management of monument objects and values.

Effects of Alternative B -- No Action Alternative
Under the No Action Alternative, wild horse populations would continue to exceed the productive capability of the portions of the Golden Gate and Seaman Range HAs within the monument. This excess of wild horses could be detrimental to objects and values (i.e. wildlife and plant habitat and the ranching lifestyle) identified in the proclamation that established the area as a National Monument.

3.2.8. Noxious Weeds and Invasive Non-native Species

3.2.8.1 Affected Environment
The BLM defines a weed as a non-native plant that disrupts or has the potential to disrupt or alter the natural ecosystem function, composition and diversity of the site it occupies. A weeds presence deteriorates the health of the site. Weeds makes efficient use of natural resources difficult and it may interfere with management objectives for that site. It is an invasive species that requires a concerted effort (manpower and resources) to remove from its current location, if it can be removed at all. "Noxious" weeds refer to those plant species which have been legally designated as unwanted or undesirable. This includes national, state and county or local designations.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. Currently, there are no documented weed infestations within the White River HA. The following weed species are found within the combined Seaman HA:

Acroptilon repens	Russian knapweed
Lepidium draba	Hoary cress
Onopordum acanthium	Scotch thistle
Tamarix spp.	Salt cedar

The following noxious and non-native, invasive species are found along roads and drainages leading into both HAs:

Acroptilon repens	Russian knapweed
Carduus nutans	Musk thistle
Centaurea diffusa	Diffuse knapweed
Centaurea stoebe	Spotted knapweed
Cirsium arvense	Canada thistle
Cirsium vulgare	Bull thistle
Lepidium draba	Hoary cress

Lepidium latifolium	Tall whitetop
Linaria dalmatica	Dalmatian toadflax
Onopordum acanthium	Scotch thistle
Tamarix spp.	Salt cedar

The Seaman HA were last inventoried for noxious weeds in 2007. The White River HA was last inventoried for noxious weeds in 2002. It should be noted that both of these HAs occur near or on the Ely District boundary with the BLM Battle Mountain District. Weed inventory data for the BLM Battle Mountain District is not available. While not officially documented the following non-native invasive weeds probably occur in or around the project area:

Bromus tectorum	Cheatgrass	*Marrubium vulgare*	Horehound
Ceratocephala testiculata	Bur buttercup	*Salsola kali*	Russian thistle
Convolvulus arvensis	Field bindweed	*Sysimbrium altissimum*	Tumble mustard
Halogeton glomeratus	Halogeton	*Verbascum thapsus*	Common mullein

3.2.8.2 Environmental Effects

Effects of Alternative A -- Proposed Action

A Noxious and Invasive Weed Risk Assessment was completed for this project (Appendix II). The proposed gather may spread existing noxious or invasive weed species. This could occur if vehicles drive through infestations and spread seed into previously weed-free areas. The contractor together with the contracting officer's representative or project inspector (COR/PI) would examine proposed trap sites and holding corrals for noxious weeds prior to construction. If noxious weeds are found, the location of the facilities would be moved. Any off-road equipment would be cleaned with high pressure equipment prior to entering public lands and, if exposed to weed infestations while completing the project, would be cleaned before moving into weed free areas. The Ely District normally requires that all hay, straw, and hay/straw products use in project be free of plant species listed on the Nevada noxious weed list. However, this gather is being implemented through the National Wild Horse & Burro Gather Contract and there are no stipulations in this national contract that require the contractor to provide certified weed-free forage. To minimize the potential impact of using non-certified hay/straw products, all trap sites, holding facilities, and camping areas on public lands would be monitored for weeds during the next several years. Any new infestations noted will be immediately reported to the Ely District Office Weeds Coordinator. Despite short-term risks, over the long term the reduction in wild horse numbers and the subsequent recovery of the native vegetation would result in a more robust and diverse native plant community which would be more resistant to non-native plant invasion.

Effects of Alternative B -- No Action Alternative

Under this alternative, the wild horse gather for these HAs would not take place at this time. The likelihood of noxious or invasive weeds being spread by gather operations would not exist. However, continued overgrazing of the present plant communities by increased wild horse numbers could lead to an expansion of noxious weeds and invasive non-native species due to poor native plant composition.

3.2.9. Livestock Grazing

3.2.9.1 Affected Environment

The Seaman HA includes portions of the Black Bluff, Coal Valley, Dry Farm, Forest Moon, Fox Mountain (West Fox Mountain Pasture), Needles, South Coal Valley, Sunnyside (West White River Pasture), Timber Mountain, and West Timber Mountain grazing allotments. The White River HA includes portions of the Cove, Duckwater (Red Mountain Use Area), Hardy Spring,

North Cove, and Wells Dee Gee (Wells Station Pasture) grazing allotments (see Appendix IV reference map of the areas of grazing allotments included within the Herd Areas). Over the past ten years some of the permittees have not activated full use within their allotments due to inadequate forage (see Table 2 and Table 3 below). The grazing permittees provide water to these allotments, primarily at wells to which the permittee has an appropriated water right. They also haul water to designated locations. These water sources are typically available only when livestock are on the allotments. Maintaining the functionality of existing water developments, pumping of water wells, and tending any planned water haul sites associated with livestock operations are responsibilities of grazing the permittees. Grazing permittee responsibility for managing and maintaining water sources are necessary to support livestock distribution on the allotments during the period of use.

Table 2. Seaman Herd Area

Grazing Allotment/Pasture	Season of Use	Permitted AUMs	Average Over Ten Years Active Use	Percent of Permit Use
Black Bluff	Cattle 9/01 to 5/15, Sheep 9/01 to 4/15	1,668	359	22%
Coal Valley	Cattle 9/01 to 5/15, Sheep 11/1 to 4/10	4,821	2,531	53%
Dry Farm	Cattle 6/01 to 9/30, Sheep 10/01 to 4/15	1,530	672	44%
Forest Moon	Cattle 5/01 to 2/28	2,263	770	34%
Fox Mountain/West Fox Mountain Pasture	Cattle 11/01 to 4/10, Sheep 11/01 to 4/10	2,588	633	26%
Needles	Cattle 10/01 to 2/28, Sheep 10/01 to 4/15	2,679	930	35%
South Coal Valley	Cattle 9/01 to 5/15, Sheep 12/01 to 4/15	2,205	450	20%
Sunnyside/West White River Pasture	Cattle 12/01 to 3/31	2,387	1,678	70%
Timber Mountain	Cattle 11/01 to 4/10, Sheep 11/01 to 4/10	2,373	252	11%
West Timber Mountain	Sheep 12/01 to 4/15, Cattle 11/15 to 3/31	735	200	27%

Table 3. White River Herd Area

Grazing Allotment/Pasture	Season of Use	Permitted AUMs	Average Over Ten Years Active Use	Percent of Permit Use
Cove	Cattle 11/01 to 4/15	1,544	702	45%
Duckwater/Red Mtn. Use Area	Cattle 3/01 to 4/30, 12/01 to 02/28, 03/01 to 06/15, 11/01 to 02/28	1,470	236	16%
Hardy Spring	Cattle 10/15 to 5/15	3,466	1,262	36%
North Cove	Cattle 10/15 to 5/15	1,335	776	57%
Wells-Dee Gee/Wells Station Pasture	Cattle 12/1 to 5/31	312	171	55%

3.2.9.2 Environmental Effects

Effects of Alternative A -- Proposed Action

Livestock located near gather activities would be disturbed by the helicopter and the increased vehicle traffic during the gather operation. This displacement would be temporary; and the

livestock would move back into the area once gather operations moved. Past experience has shown that gather operations have little impacts to grazing cattle. With the removal of all excess wild horses forage conditions (quality and quantity) will be improved.

Effects of Alternative B -- No Action Alternative
Livestock would not be displaced or disturbed due to gather operations under the No Action Alternative. Forage conditions (quality/quantity and availability) would continue to be negatively impacted on the range and livestock are going to distribute to other areas of the allotments. Also competition for water resources will continue at wells, water haul sites, and springs. Impacts will also spread to areas outside of the HA boundaries as the wild horses expand their range in search of forage and water resources.

3.2.10 Vegetation Resources

3.2.10.1 Affected Environment
The Seaman and White River HAs major plant communities are the pinyon-juniper woodland in the mountains and the salt desert shrub communities in the valleys. The salt desert shrub community is composed of two major vegetation zones: the shadscale and the sagebrush.

The pinyon-juniper zone, scattered throughout the area, generally occurs above 6,000 feet within and surrounding the mountain ranges. Stands of these pinyon pine and juniper trees vary in density from scattered trees to closed (solid) stands.

The shadscale zone is found mostly in the bottoms of the valleys. Plants in this zone have adapted to the very arid saline soils of the valleys. Important plants in this zone are shadscale, winterfat, black sagebrush and black greasewood.

The sagebrush zone is scattered throughout the area, occurring between 5,500 feet and 7,000 feet where soils are less salty and more gravelly in nature. The big sagebrush zone provides an important source of perennial grasses and forbs for wildlife in the area.

3.2.10.2 Environmental Effect
Effects of Alternative A – Proposed Action
Removal of excess wild horses would result in decreased grazing pressure on vegetation resources. These areas would be expected to improve in the absence of over-utilization attributed by wild horses, which would lead to healthier, more vigorous forage plants. Over the long-term, improving range conditions would be expected to result in increased vegetation density, reproduction and productivity and an increase in the amount of vegetation available for use as forage. This could take numerous years (may take 20+ years in some areas) in the harsh Mojave Desert environment.

Some temporary impacts to vegetation could result with implementation of the Proposed Action. Included would be disturbance of native vegetation immediately in and around temporary trap sites or holding facilities. Direct impacts could result from vehicle traffic or the hoof action of penned horses, and could be locally severe in the immediate vicinity of the trap sites or holding facility's. Generally, these activity sites would be small (less than one half acre) in size. Since most trap sites or holding facilities would be re-used and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and

logistical support equipment and would generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots that have been previously disturbed. By adhering to the SOPs, adverse impacts to soils as a result of capture operations would be minimized.

Effects of Alternative B – No Action Alternative
Under the no action alternative, wild horse populations would continue to grow, continued heavy to excessive utilization would result in further decreases in vegetation cover and lead to increased soil erosion throughout the HAs as well as areas outside the HAs boundaries where wild horses currently living.

Over the long term, increased use by wild horses on the shallow soils typical of this region would be expected to reduce plant vigor and abundance. Over time, decreasing soil and vegetation health has potential to subject the range to invasion by non-native plant species or noxious weeds. A shift in plant composition to weedy species would result in a less vegetation available for use as forage. In addition loss of topsoil would cause an increase in erosion, and decrease in plant productivity. These impacts would also be seen outside the HAs, and could affect even larger geographic areas as wild horses forage further from the HA boundaries. A wild horse removal would not occur at this time. As a result, the potential for localized trampling or vegetation/soil disturbance associated with the trap sites and temporary holding facilities needed to conduct a gather operation would not occur.

4.0 CUMULATIVE EFFECTS

4.1 Introduction
Cumulative Impacts are impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The area of cumulative impact analysis is the Seaman and White River Herd Areas. (Map 1)

According to the 1994 BLM Guidelines for Assessing and Documenting Cumulative Impacts, the cumulative analysis should be focused on those issues and resources values identified during scoping that are of major importance. Issues of major importance that are analyzed include maintaining rangeland health and achieving and maintaining objectives set forth in the 2008 Ely District Record of Decision and Approved RMP at management action WH-5.

Past, Present, and Reasonably Foreseeable Actions
The past, present, and reasonable foreseeable future actions applicable to the assessment area are identified as the following:

Project -- Name or Description	Status (x)		
	Past	Present	Future
Issuance of multiple use decisions and grazing permits for ranching operations through the allotment evaluation process and the reassessment of the associated allotments.	x	x	X
Livestock grazing	x	x	X
Wild horse and burro gathers	x	x	X
Mineral exploration / geothermal exploration/abandoned mine land reclamation	x	x	X
Recreation	x	x	X

Range Improvements (including fencing, wells, and water developments)	x	x	X
Wildlife guzzler construction	x	x	X
Invasive weed inventory/treatments	x	x	X
Wild horse and burro management: issuance of multiple use decisions, AML adjustments and planning	x	x	X

Any future proposed projects within the Seaman and White River Herd Areas would be analyzed in an appropriate environmental document following site specific planning. Future project planning would also include public involvement.

Past Actions
In 1971 Congress passed the Wild Free-Roaming Horses and Burros Act which placed wild and free-roaming horses and burros, that were not claimed for individual ownership, under the protection of the Secretaries of Interior and Agriculture. In 1976 the Federal Land Policy and Management Act (FLPMA) gave the Secretary the authority to use motorized equipment in the capture of wild free-roaming horses as well as continued authority to inventory the public lands. In 1978, the Public Range Improvement Act (PRIA) was passed which amended the WFRHBA to provide additional directives for BLM's management of wild free-roaming horses on public lands.

Past actions include establishment of wild horse HMAs, establishment of AML for wild horses, wild horse gathers, vegetation treatment, mineral extraction, oil and gas exploration, livestock grazing and recreational activities throughout the area. Some of these activities have increased infestations of invasive plants, noxious weeds, and pests and their associated treatments.

BLM delineated the Golden Gate Herd Area (HA) approximately 96,247 acres), Seaman Range HA (approximately 262,553acres) and White River HA (approximately 116,300) of which is approximately 475,100 acres on BLM. The Golden Gate HA and Seaman Range HA were combined (approximately 358,800 acres) through land use planning (the 1986 Egan RMP and 1983 Schell MFP), these entire HAs (100%) were designated as herd management areas suitable for long-term management of wild horses. The 1986 Egan RMP and 1983 Schell MFP also established the interim AML for Seaman HMA 159 wild horses and White River HMA 90 Wild Horses.

In 2008, BLM issued Ely District ROD and Approved Resource Management Plan. The Ely District ROD/Approved RMP management action WH-5 states: "Remove wild horses and drop herd management area status for those … as listed in Table 13." Seaman and White River were dropped from HMA status and returned to HA status (manage "0" wild horses) with this management action. The management action to achieve 0 wild horses within the Seaman HA (Golden Gate and Seaman Range HAs) as well as White River HA reflect the recent evaluation based on multi-tiered analysis from the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007) table 3.8-2 and page 4.8-2. The EIS (November 2007) evaluated each herd management area for five essential habitat components and herd characteristics: forage, water, cover, space, and reproductive viability. If one or more of these components were missing, or there was no potential for a stable shared genetic pool, the herd management area was considered unsuitable. The combined Golden Gate HA and Seaman Range HA as well as White River HA have inadequate forage, marginal to very little water on

public lands, and inadequate reproductive viability. The combined Golden Gate and Seaman Range HA also has no summer habitat and inadequate cover.

Seaman and White River Herd Areas have been gathered 4 times in the past on part or all of the HAs. Approximately 1,372 wild horses have been removed from the HAs in the last 25 years. Adjustments in livestock season of use, livestock numbers, and grazing systems were made through the allotment evaluation/multiple use decision process. In addition, temporary closures to livestock grazing in areas burned by wildfires, or due to extreme drought conditions, were implemented to improve range condition.

The Mojave/Southern Great Basin Resource Advisory Council (RAC) developed standards and guidelines for rangeland health that have been the basis for assessing rangeland health in relation to management of wild horses and livestock grazing within the Ely District. Adjustments in numbers, season of use, grazing season, and allowable use have been based on the evaluation of progress made toward reaching the standards.

Several oil and gas exploration wells have been drilled across the CESA however none of these wells have gone into production. The Ely RMP/EIS summarized the history of oil and gas exploration on pages 3.18-7 to 3.18-9.

Historical mining activities have occurred throughout the CESA.

4.2.2 Present Actions

Today the Seaman and White River HAs have an estimated population of 365 wild horses. Resource damage is occurring both within and outside the HA due to this overpopulation of wild horses. Current BLM policy is to achieve the Ely District ROD and Approved RMP (August 2008) at management action WH-5 states: "Remove wild horses and drop herd management area status for those … as listed in Table 13." Seaman and White River were dropped from HMA status with this decision, requiring all excess wild horses be removed from these HA's.

Under the WFRHBA, healthy excess wild horses can be euthanized or sold without limitation if there is no adoption demand for the animals. However, while euthanasia and sale without limitation are allowed under the statute, these activities have not been permitted under current Congressional appropriations for over a decade and are consequently inconsistent with BLM policy. If Congress were to lift the current appropriations restrictions, then it is possible that excess horses removed from the HMA over the next 10 years could potentially be euthanized or sold without limitation consistent with the provisions of the WFRHBA.

Any old, sick or lame horses unable to maintain an acceptable body condition (greater than or equal to a Henneke BCS of 3) or with serious physical defects would be humanely euthanized either before gather activities begin or during the gather operations. Decisions to humanely euthanize animals in field situations would be made in conformance with BLM policy (Washington Office Instruction Memorandum (WO IM) 2015-070 or most current edition). Conditions requiring humane euthanasia occur infrequently and are described in more detail in Washington Office Instruction Memorandum 2009-041.

The BLM is continuing to administer grazing permits and authorize grazing with the CESA. Within the proposed gather area sheep and cattle grazing occurs on a yearly basis. Wildlife use by large ungulates such as elk, deer, and antelope is also currently common in the CESA.

The focus of wild horse management has also expanded to place more emphasis on achieving rangeland health as measured against RAC Standards. The Mojave-Southern Great Basin RAC standards and guidelines for rangeland health are the current basis for assessing rangeland health in relation to management of wild horse and livestock grazing within the Ely District. Adjustments to numbers, season of use, grazing season and allowable use are based on evaluating achievement of or making progress toward achieving the standards.

Active oil and gas leases occur throughout the CESA.

Portions of the Seaman HA are within the Basin and Range National Monument. The monument was designated in 2015 for objects of cultural, natural, and scientific interest as well as to ensure persistence of values identified in the Presidential Proclamation that established the area as a National Monument. Habitat for a variety of plant and animal species is identified in the proclamation. Basque and other ranchers have historically used this area for sheep and cattle grazing, and the ranching lifestyle is a value identified in the proclamation. Wild horses were not identified as an object or value in the proclamation.

4.2.3 Reasonably Foreseeable Future Actions

In the future, the BLM would continue to work towards achieving the Ely District ROD and Approved RMP (August 2008) at management action WH-5 states: "Remove wild horses and drop herd management area status for those … as listed in Table 13." Seaman and White River were dropped from HMA status with this decision, requiring all excess wild horses be removed from these HA's. Currently the Basin and Range National Monument (BARNM) is developing a Resources Management Plan which will further direct resource management with in BARNM. Wild horses were not identified as an object or value in the proclamation for BARNM.

Improvements to rangeland management associated with livestock grazing are also expected to continue within the project area. These improvements could include installation of fences, water locations, and cattle guards. Range allotments also under go a review of the grazing permits and practices every 10 years through which the health of the range is assessed to determine what, if any, improvements are to be made to meet rangeland health standards.

4.3 Cumulative Impact Analysis

Cumulative beneficial effects from the Proposed Action are expected, and would include continued improvement of riparian-wetland conditions, which would in turn positively impact native wildlife as forage quantity and quality is improved over the current level.

Direct cumulative impacts of the No Action alternative coupled with impacts from past, present and reasonably foreseeable future actions would result in foregoing an opportunity to improve watershed health. As a result, the No Action Alternative, in conjunction with many of the past, present and reasonably foreseeable future actions would result in non-attainment of RMP or the Standards for Rangeland Health and Wild Horse and Burro Populations.

Land-disturbing and transportation activities within the cumulative effects study area that can increase chances of spreading existing non-native invasive species (including noxious weeds) populations include reasonably foreseeable future action including grazing, and possible wildland

fires. Effects from past activities have facilitated the spread of noxious species, especially along transportation routes, drainages, and disturbed areas.

Establishment of non-native, invasive species would likely occur under the Proposed Action and other interrelated projects. However, the spread of noxious weeds would be minimized through the stipulations listed in the Weed Risk Assessment (Appendix II) incorporated into the Proposed Action. In addition, the active BLM Ely District Weed Management Program would minimize the spread of weeds within the Herd Area Boundaries.

The combination of the past, present, and reasonably foreseeable future actions, along with implementation of the Proposed Action, should result in healthier rangelands and fewer multiple-use conflicts within and adjacent to the Seaman and White River HAs.

5.0 MITIGATION MEASURES AND SUGGESTED MONITORING

Proven mitigation and monitoring are incorporated into the Proposed Action through SOPs, which have been developed over time. These SOPs (Appendix I and II) represent the "best methods" for reducing impacts associated with gathering, handling, and transporting wild horses.

6.0 CONSULTATION AND COORDINATION

Public hearings are held annually on a state-wide basis regarding the use of motorized vehicles, including helicopters and fixed-wing aircraft, in the management of wild horses (or burros). During these meetings, the public is given the opportunity to present new information and to voice any concerns regarding the use of the motorized vehicles.

The Ely District Office held the state-wide meeting on June 27, 2017; two public participants attended and their comments were entered into the record for this hearing. Specific concerns included: (1) whether Most were in support of the use of helicopters and the gathering of excess wild horses. Standard Operating Procedures (SOP) were reviewed in response to these concerns and no changes to the SOPs were indicated based on this review.

A certified letter inviting the tribes to initiate Government to Government Consultation was sent on September 8, 2017. At this time, none of the tribes have expressed a desire to enter into formal consultation, although the opportunity is ongoing. The main concern consistently identified by tribes is protection of and access to natural, medicinal, and sacred resources, traditional use areas, and sacred sites. Each tribe also maintains a general concern for the welfare of plants, animals, air, landforms, and water.

6.1 List of Preparers

6.1.1 BLM:

Name	Title	Responsible for the Following Section(s) of this Document
Ruth Thompson	Wild Horse Specialist	Project Lead/ Wild Horse
Ben Noyes	Wild Horse Specialist	Wild Horse
Concetta Brown	Natural Resources Specialist	NEPA Coordinator
Andrew Gault	Hydrologist	Soil, Air Quality, Water Quality, Floodplains, Riparian/Wetlands

Chris McVicars	Natural Resource Specialist (Weeds)	Invasive, Non-Native Species
Ian Collin	Rangeland Management Specialist	Range
Chris Mayer	Associate Field Manager	Range
Mindy Seal	Bristlecone Field Manager	
Lisa Gilbert	Archeologist Technician	Arch/Historic Paleontological
Nancy Herms	Wildlife Biologist	Wildlife, Migratory Birds, Special Status Animals, Special Status Plants, Area of Critical Environmental Concern
John Miller	Planning and Environmental Coordinator (Wilderness)	Wilderness Values
Chris Hanefeld	Public Affairs Specialist	Public Affairs

6.0 REFERENCES, GLOSSARY AND ACRONYMS

6.1 References Cited

USDOI, BLM. 2008. National Environmental Policy Act. Handbook-1790-1.

USDOI. 2007. Ely Proposed Resource Management Plan/ Final Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management. BLM/EL/PL-07/09+1793. DOI No. FES07-40. November 2007

USDOI. 2008. Ely District Record of Decision and Approved Resource Management Plan. U.S. Department of the Interior, Bureau of Land Management. BLM/NV/EL/PL-GI08/25+1793.

USDOI, Bureau of Land Management. 1994. Guidelines for assessing and documenting cumulative impacts. WO-IB-94-310.

USDOI.2015. Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. U.S. Department of the Interior, Bureau of Land Management, Nevada State Office Reno, NV

109 Interior Board of Land Appeals 119 API 1989.

118 Interior Board of Land Appeals 75.

Interior Board of Land Appeals 88-591, 88-638, 88-648, 88-679 at 127

Beever, E. 2003. Management implications of the ecology of free-roaming horses in semi-arid ecosystemts of the western United States. Wildlife Society Bulletin 31:887-895.

Beever, E. 2003. Management Implications of the Ecology of Free-Roaming Horses in Semi-Arid Ecosystems of the Western United States. Wildlife Society Bulletin 31 (3):887-895.

Berger, J. 1977. Organizational systems and dominance in feral horses in the Grand Canyon. Behavioral Ecology and Sociobiology 2:131-46.

Coates-Markle, L. 2000. Summary Recommendations, BLM Wild Horse and Burro Population Viability Forum April 1999, Ft. Collins, CO. Resource Notes 35:4pp.

Floyd, T. et al. 2007. Atlas of the Breeding Birds of Nevada. University of Nevada Press, Reno Nevada.

Ganskopp, D.C. 1983. Habitat use and Spatial Interactions of Cattle, Wild Horses, Mule Deer, and California Bighorn Sheep in the Owyhee Breaks of Southeast Oregon. PhD Dissertation, Oregon State University.

Ganskopp, D.C. 1983. Habitat use and Spatial Interactions of Cattle, Wild Horses, Mule Deer, and California Bighorn Sheep in the Owyhee Breaks of Southeast Oregon. PhD Dissertation, Oregon State University.

Ganskopp, D.C. and M. Vavra. 1986. Habitat Use by Feral Horses in the Northern Sagebrush Steppe. Journal of Range Mangement 39(3):207-211.

Ganskopp, D.C. and M. Vavra. 1987. Slope Use by cattle, feral horses, deer, and bighorn sheep. Northwest Science, 61(2):74-80.

Great Basin Bird Observatory. 2003. Nevada Bird Count. A habitat-based monitoring program for breeding birds of Nevada. Instruction package and protocol for point count surveys.

Hall, L.K., R.T. Larsen, M.D. Westover, C.C. Day, R.N. Knight and B.R. McMillan. 2016. Influence of exotic horses on the use of water by communities of native wildlife in a semi-arid environment. Journal of Arid Environments 127:100-105.

Hanley, T.A. 1982. The Nutritional Basis for Food Selection by Ungulates. Journal of Range Management 35 (2): 146-151.

Hanley, T.A., and K.A. Hanley. 1982. Food Resource Partitioning by Sympatric Ungulates on Great Basin Rangeland. Journal of Range Management 35 (2): 152-158.

Hansen, R.M., R.C. Clark, and W. Lawhorn. 1977. Foods of Wild Horses, Deer, and Cattle in the Douglas Mountain Area, Colorado. Journal of Range Management 30 (2): 116-118.

Hubbard, R.E., and R. M. Hansen. 1976. Diets of Wild Horses, Cattle, and Mule Deer in the Piceance Basin, Colorado. Journal of Range Management 29 (5): 389-392.

Jenkins, S. 2002. Feral horse population model, WinEquus.

Krysl, L.J., M.E. Hubbert, B.F. Sowell, G.E. Plumb, T.K. Jewett, M.A. Smith, and J.W. Waggoner.1984. Horses and Cattle Grazing in the Wyoming Red Desert, I. Food Habits and Dietary Overlap. Journal of Range Management 37 (1): 72-76.

McInnis, M.A. 1984. Ecological Relationships among Feral Horses, Cattle, and Pronghorn in Southeastern Oregon. PhD Dissertation. Oregon State University.

McInnis, M.A. 1984. Ecological Relationships among Feral Horses, Cattle, and Pronghorn in Southeastern Oregon. PhD Dissertation. Oregon State University.

McInnis, M.A. and M. Vavra. 1987. Dietary relationships among feral horses, cattle, and Prognhorn in southeastern Oregon. Journal of Range Management. 40(1):60-66.Meeker, J.O. 1979. Interactions Between Pronghorn Antelope and Feral Horses in Northwestern Nevada. Master's Thesis. University of Nevada, Reno, Reno, Nevada.

Menard, C., P. Duncan, G. Fleurance, J. Georges, and M. Lila. 2002. Comparative Foraging and Nutrition of Horses and Cattle in European Wetlands. Journal of Applied Ecology39 (1): 120-133.

Neel, L.A. (Editor). 1999. Nevada Partners in Flight Bird Conservation Plan. Nevada Department of Wildlife. March 2007. www.ndow.org

Nevada Natural Heritage Program. March 2008. www.heritage.nv.gov
NOAA. www.cpc.ncep.noaa.gov
Olsen, F.W., and R.M. Hansen. 1977. Food Relations of Wild Free-Roaming Horses to Livestock and Big Hame, Red Desert, Wyoming. Journal of Range Management 30 (1): 17-20.
Ostermann-Kelm, S., E.R. Atwill, E.S. Rubin, M.C. Jorgensen, and W.M. Boyce. 2008. Interactions between feral horses and desert bighorn sheep at water. Journal of Mammalogy 89:459-466.
Ostermann-Kelm, S.D., E.A. Atwill, E.S. Rubin, L.E. Hendrickson, and W.M. Boyce, 2009. Impacts of Feral Horses on a Desert Environment. BMC Ecology 9:22.
Platts, W.S., and J.n. Rinne. 1985. Riparian and stream enhancement management and research in the Rocky Mountains. North American Journal of Fisheries Management 5:115-125.
Singer F.J., Aeignefuss L. 2000. Genetic Effective Population Size in the Pryor Mountain Wild Horse Herd: Implications for conserving genetics and viability goals in wild horses. U.S. Geologic Survey, Midcontinent Ecological Science Center, Ft. Collins CO. Resource Notes 29:2 pp.
Smith, M.A and J.W. Waggoner, Jr., et al. 1982. Vegetation Utilization, Diets, and Estimated Dietary Quality of Horses and Cattle Grazing in the Red Desert of West central Wyoming. BLM Contract No. AA851-CTO-31.
Smith, M.A and J.W. Waggoner, Jr., et al. 1982. Vegetation Utilization, Diets, and Estimated Dietary Quality of Horses and Cattle Grazing in the Red Desert of West central Wyoming. BLM Contract No. AA851-CTO-31.Society for Range Mgt. 1974. A glossary of terms used in Range Management, 2nd Edition. Society for Range Management, Denver, Colo.
Smith, M.A. 1986a. Impacts of Feral Horses Grazing on Rangelands: An Overview. Equine Veterinary Science, 6(5):236-238.
Smith, M.A. 1986b. Potential Competitive Interactions Between Feral Horses and Other Grazing Animals. Equine Veterinary Science, 6(5):238-239.
Society for Range Mangement, 1989. A glossary of Terms Used in Range Mangement (Third ed.). Society for Range Mangement, Denver, Colo.
Symanski, R. 1994. Contested realities: feral horses in outback Australia. Annals of the Association of American Geographers, 84:251-269.
Vavra, M. and F. Sneva. 1978. Seasonal Diets of five ungulates grazing the cold desert biome. Proceedings of the First International Rangeland Congress. Society for Range Mgt. Denver, CO.
Vavra, M., and F. Sneva. 1978. Seasonal diets of five ungulates grazing the cold desert biome. Proceedings of the first international rangeland congress, Denver, Colorado. Hyder, D.N., Editor. Society for Range Management. 1978.

6.2 Acronyms
BLM-Bureau of Land Management
CFR-Code of Federal Regulations

DR-Decision Record
EA-Environmental Assessment
EIS-Environmental Impact Statement
FLPMA-Federal Land Policy and Management Act
FONSI-Finding of No Significant Impact
HA – Herd Area
HMA – Herd Management Area
ID-Interdisciplinary
IM-Instructional Memorandum
NEPA-National Environmental Policy Act
RFS-Reasonably Foreseeable Future Action
RMP-Resource Management Plan

APPENDIX I
STANDARD OPERATING PROCEDURES

Gathers would be conducted by utilizing contractors from the Wild Horse Gathers-Western States Contract, or BLM personnel. The following procedures for gathering and handling wild horses would apply whether a contractor or BLM personnel conduct a gather. For helicopter gathers conducted by BLM personnel, gather operations will be conducted in conformance with the *Wild Horse Aviation Management Handbook* (January 2009).

Prior to any gathering operation, the BLM will provide for a pre-capture evaluation of existing conditions in the gather area(s). The evaluation will include animal conditions, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with wilderness boundaries, the location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine whether the proposed activities will necessitate the presence of a veterinarian during operations. If it is determined that a large number of animals may need to be euthanized or capture operations could be facilitated by a veterinarian, these services would be arranged before the capture would proceed. The contractor will be apprised of all conditions and will be given instructions regarding the capture and handling of animals to ensure their health and welfare is protected.

Trap sites and temporary holding sites will be located to reduce the likelihood of injury and stress to the animals, and to minimize potential damage to the natural resources of the area. These sites would be located on or near existing roads whenever possible.

The primary capture methods used in the performance of gather operations include:

1. Helicopter Drive Trapping. This capture method involves utilizing a helicopter to herd wild horses into a temporary trap.
2. Helicopter Assisted Roping. This capture method involves utilizing a helicopter to herd wild horses or burros to ropers.
3. Bait Trapping. This capture method involves utilizing bait (e.g., water or feed) to lure wild horses into a temporary trap.

The following procedures and stipulations will be followed to ensure the welfare, safety and humane treatment of wild horses in accordance with the provisions of 43 CFR 4700.

A. Capture Methods used in the Performance of Gather Contract Operations

1. The primary concern of the contractor is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following:

All trap and holding facilities locations must be approved by the Contracting Officer's Representative (COR) and/or the Project Inspector (PI) prior to construction. The Contractor may also be required to change or move trap locations as determined by the COR/PI. All traps and holding facilities not located on public land must have prior written approval of the landowner.

2. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers, weather, condition of the animals and other factors. Under normal circumstances this travel should not exceed 10 miles and may be much less dependent on existing conditions (i.e. ground conditions, animal health, extreme temperature (high and low)).

3. All traps, wings, and holding facilities shall be constructed, maintained and operated to handle the animals in a safe and humane manner and be in accordance with the following:

    a. Traps and holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inches high for horses and 60 inches for burros, and the bottom rail of which shall not be more than 12 inches from ground level. All traps and holding facilities shall be oval or round in design.

    b. All loading chute sides shall be a minimum of 6 feet high and shall be fully covered, plywood, metal without holes larger than 2”x4”.

    c. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high for horses, and 5 feet high for burros, and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 5 feet above ground level for burros and 1 foot to 6 feet for horses. The location of the government furnished portable fly chute to restrain, age, or provide additional care for the animals shall be placed in the runway in a manner as instructed by or in concurrence with the COR/PI.

    d. All crowding pens including the gates leading to the runways shall be covered with a material which prevents the animals from seeing out (plywood, burlap, plastic snow fence, etc.) and shall be covered a minimum of 1 foot to 5 feet above ground level for burros and 2 feet to 6 feet for horses

    e. All pens and runways used for the movement and handling of animals shall be connected with hinged self-locking or sliding gates.

4. No modification of existing fences will be made without authorization from the COR/PI. The Contractor shall be responsible for restoration of any fence modification which he has made.

5. When dust conditions occur within or adjacent to the trap or holding facility, the Contractor shall be required to wet down the ground with water.

6. Alternate pens, within the holding facility shall be furnished by the Contractor to separate mares or jennies with small foals, sick and injured animals, estrays or other animals the COR determines need to be housed in a separate pen from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age, sex, or other necessary procedures. In these instances, a portable restraining chute may be necessary and will be provided by the government. Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires that animals be released back into the capture area(s). In areas requiring one or more satellite traps, and where a centralized holding facility is utilized, the contractor may be required to provide additional holding pens to segregate animals transported from remote locations so they may be returned to their traditional ranges. Either segregation or temporary marking and later segregation will be at the discretion of the COR.

7. The Contractor shall provide animals held in the traps and/or holding facilities with a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or holding facilities shall be provided good quality hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day. The contractor will supply certified weed free hay if required by State, County, and Federal regulation.

   An animal that is held at a temporary holding facility through the night is defined as a horse/burro feed day. An animal that is held for only a portion of a day and is shipped or released does not constitute a feed day.

8. It is the responsibility of the Contractor to provide security to prevent loss, injury or death of captured animals until delivery to final destination.

9. The Contractor shall restrain sick or injured animals if treatment is necessary. The COR/PI will determine if animals must be euthanized and provide for the destruction of such animals. The Contractor may be required to humanely euthanize animals in the field and to dispose of the carcasses as directed by the COR/PI.

10. Animals shall be transported to their final destination from temporary holding facilities as quickly as possible after capture unless prior approval is granted by the COR for unusual circumstances. Animals to be released back into the HMA following gather operations may be held up to 21 days or as directed by the COR. Animals shall not be held in traps and/or temporary holding facilities on days

when there is no work being conducted except as specified by the COR. The Contractor shall schedule shipments of animals to arrive at final destination between 7:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sunday and Federal holidays, unless prior approval has been obtained by the COR. Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours in any 24 hour period. Animals that are to be released back into the capture area may need to be transported back to the original trap site. This determination will be at the discretion of the COR/PI or Field Office horse specialist.

B. Capture Methods That May Be Used in the Performance of a Gather

1. Capture attempts may be accomplished by utilizing bait (feed, water, mineral licks) to lure animals into a temporary trap. If this capture method is selected, the following applies:

    a. Finger gates shall not be constructed of materials such as "T" posts, sharpened willows, etc., that may be injurious to animals.

    b. All trigger and/or trip gate devices must be approved by the COR/PI prior to capture of animals.

    c. Traps shall be checked a minimum of once every 10 hours.

2. Capture attempts may be accomplished by utilizing a helicopter to drive animals into a temporary trap. If the contractor selects this method the following applies:

    a. A minimum of two saddle-horses shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as determined by the COR/PI. Under no circumstances shall animals be tied down for more than one half hour.

    b. The contractor shall assure that foals shall not be left behind, and orphaned.

3. Capture attempts may be accomplished by utilizing a helicopter to drive animals to ropers. If the contractor, with the approval of the COR/PI, selects this method the following applies:

    a. Under no circumstances shall animals be tied down for more than one hour.

    b. The contractor shall assure that foals shall not be left behind, or orphaned.

    c. The rate of movement and distance the animals travel shall not exceed limitations set by the COR/PI who will consider terrain, physical barriers,

weather, condition of the animals and other factors.

C. Use of Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals. The Contractor shall provide the COR/PI, if requested, with a current safety inspection (less than one year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.

2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.

3. Only tractor-trailers or stock trailers with a covered top shall be allowed for transporting animals from trap site(s) to temporary holding facilities, and from temporary holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of 6 feet 6 inches from the floor. Single deck tractor-trailers 40 feet or longer shall have at least two (2) partition gates providing at least three (3) compartments within the trailer to separate animals. Tractor-trailers less than 40 feet shall have at least one partition gate providing at least two (2) compartments within the trailer to separate the animals. Compartments in all tractor-trailers shall be of equal size plus or minus 10 percent. Each partition shall be a minimum of 6 feet high and shall have a minimum 5 foot wide swinging gate. The use of double deck tractor-trailers is unacceptable and shall not be allowed.

4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one (1) door at the rear end of the trailer which is capable of sliding either horizontally or vertically. The rear door(s) of tractor-trailers and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp edges or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side. Final approval of tractor-trailers and stock trailers used to transport animals shall be held by the COR/PI.

5. Floors of tractor-trailers, stock trailers and loading chutes shall be covered and maintained with wood shavings to prevent the animals from slipping as much as possible during transport.

6. Animals to be loaded and transported in any trailer shall be as directed by the COR/PI and may include limitations on numbers according to age, size, sex, temperament and animal condition. The following minimum square feet per

animal shall be allowed in all trailers:

11 square feet per adult horse (1.4 linear foot in an 8 foot wide trailer);
8 square feet per adult burro (1.0 linear foot in an 8 foot wide trailer);
6 square feet per horse foal (.75 linear foot in an 8 foot wide trailer);
4 square feet per burro foal (.50 linear feet in an 8 foot wide trailer).

7. The COR/PI shall consider the condition and size of the animals, weather conditions, distance to be transported, or other factors when planning for the movement of captured animals. The COR/PI shall provide for any brand and/or inspection services required for the captured animals.

8. If the COR/PI determines that dust conditions are such that the animals could be endangered during transportation, the Contractor will be instructed to adjust speed.

D. Safety and Communications

1. The Contractor shall have the means to communicate with the COR/PI and all contractor personnel engaged in the capture of wild horses utilizing a VHF/FM Transceiver or VHF/FM portable Two-Way radio. If communications are ineffective the government will take steps necessary to protect the welfare of the animals.

   a. The proper operation, service and maintenance of all contractor furnished property is the responsibility of the Contractor. The BLM reserves the right to remove from service any contractor personnel or contractor furnished equipment which, in the opinion of the contracting officer or COR/PI violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the Contracting Officer or his/her representative.

   b. The Contractor shall obtain the necessary FCC licenses for the radio system

   c. All accidents occurring during the performance of any task order shall be immediately reported to the COR/PI.

2. Should the contractor choose to utilize a helicopter the following will apply:

   a. The Contractor must operate in compliance with Federal Aviation Regulations, Part 91. Pilots provided by the Contractor shall comply with the Contractor's Federal Aviation Certificates, applicable regulations of the State in which the gather is located.

b. Fueling operations shall not take place within 1,000 feet of animals.

G. Site Clearances

No personnel working at gather sites may excavate, remove, damage, or otherwise alter or deface or attempt to excavate, remove, damage or otherwise alter or deface any archaeological resource located on public lands or Indian lands.

Prior to setting up a trap or temporary holding facility, BLM will conduct all necessary clearances (archaeological, T&E, etc). All proposed site(s) must be inspected by a government archaeologist. Once archaeological clearance has been obtained, the trap or temporary holding facility may be set up. Said clearance shall be arranged for by the COR, PI, or other BLM employees.

Gather sites and temporary holding facilities would not be constructed on wetlands or riparian zones.

H. Animal Characteristics and Behavior

Releases of wild horses would be near available water. If the area is new to them, a short-term adjustment period may be required while the wild horses become familiar with the new area.

I. Public Participation

Opportunities for public viewing (i.e. media, interested public) of gather operations will be made available to the extent possible; however, the primary considerations will be to protect the health, safety and welfare of the animals being gathered and the personnel involved. The public must adhere to guidance from the on-site BLM representative. It is BLM policy that the public will not be allowed to come into direct contact with wild horses or burros being held in BLM facilities. Only authorized BLM personnel or contractors may enter the corrals or directly handle the animals. The general public may not enter the corrals or directly handle the animals at anytime or for any reason during BLM operations.

J. Responsibility and Lines of Communication

Contracting Officer's Representative/Project Inspector

Ruth Thompson, Wild Horse and Burro Specialist
Ben Noyes, Wild Horse and Burro Specialist

The Contracting Officer's Representatives (CORs) and the project inspectors (PIs) have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Egan Assistant Field Manager for Resources and Egan and Caliente

Field Managers will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, and BLM Holding Facility offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquiries will be handled through the Assistant Field Managers for Renewable Resources and Field Office Public Affairs. These individuals will be the primary contact and will coordinate with the COR/PI on any inquiries.

The COR will coordinate with the contractor and the BLM Corrals to ensure animals are being transported from the capture site in a safe and humane manner and are arriving in good condition.

The contract specifications require humane treatment and care of the animals during removal operations. These specifications are designed to minimize the risk of injury and death during and after capture of the animals. The specifications will be vigorously enforced.

Should the Contractor show negligence and/or not perform according to contract stipulations, he will be issued written instructions, stop work orders, or defaulted.

APPENDIX II

RISK ASSESSMENT FOR NOXIOUS & INVASIVE WEEDS

Seaman & White River Herd Area Wild Horse Gather
Lincoln and Nye Counties, Nevada

SECTION 1 - PROPOSED ACTION

The Bureau of Land Management's (BLMs) proposal to remove all excess wild horses from within and outside the Golden Gate, Seaman Range (referred to as Seaman HA) and White River Herd Areas (HAs) in order to achieve and maintain the appropriate management level (AML) and prevent further range deterioration resulting from the current overpopulation of wild horses. This gather plan would be good for 10 years allowing numerous gathers to take place off this document. Trapping methods would include helicopter drive trap as well as bait and water trapping.

SECTION 2 - CURRENT CONDITIONS

No project-specific field weed survey was completed for this. Instead, the Ely District weed inventory data were consulted. Table 1 shows the noxious species that are documented within and/or adjacent to the project area:

TABLE 1 - PROJECT AREA NOXIOUS SPECIES		
COMMON NAME	**LATIN NAME**	**NEVADA NOXIOUS WEED CATEGORY (NAC 555.010)**
Russian knapweed	*Acroptilon repens*	CATEGORY **B_1**
Hoary cress	*Cardaria draba*	CATEGORY **C_2**
Salt Cedar (Tamarisk)	*Tamarix* spp.	

1 Category B noxious weeds are weeds that are generally established in scattered populations in some counties of the state.

2 Category C noxious weeds are weeds that are generally established and generally widespread in many counties of the state.

The general area was last inventoried for noxious weeds in 2010. Table 2 shows a list of invasive (not noxious) species found within and/or adjacent to the project area.

TABLE 2 - AREA INVASIVE (NOT NOXIOUS) SPECIES	
COMMON NAME	**LATIN NAME**
Cheatgrass	*Bromus tectorum*
Bur buttercup	*Ceratocephala testiculata*
Filaree	*Erodium circutarium*
Halogeton	*Halogeton glomeratus*
Russian thistle	*Salsola kali*
Tumble mustard	*Sysimbrium altissimum*

SECTION 3 - RISK RATING

TABLE 3 - FACTOR 1	
Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.	
None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

The rating for Factor 1 is Low (2). This project would utilize previously disturbed areas which are known to be free of noxious weeds, and would not involve extensive off-road travel. Noxious and invasive weeds are known to be sparsely present through the Has, and would not likely spread due to project activities.

TABLE 4 - FACTOR 2	
Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.	
Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

The rating for Factor 2 is Low (3). It is possible, but highly unlikely that the spread of noxious or invasive species would lead to adverse effects.

TABLE 5 - RISK RATING	
The Risk Rating is obtained by multiplying Factor 1 by Factor 2.	
None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

The Risk Rating is Low (6). This indicates that the project can proceed as planned as long as the following measures are followed:

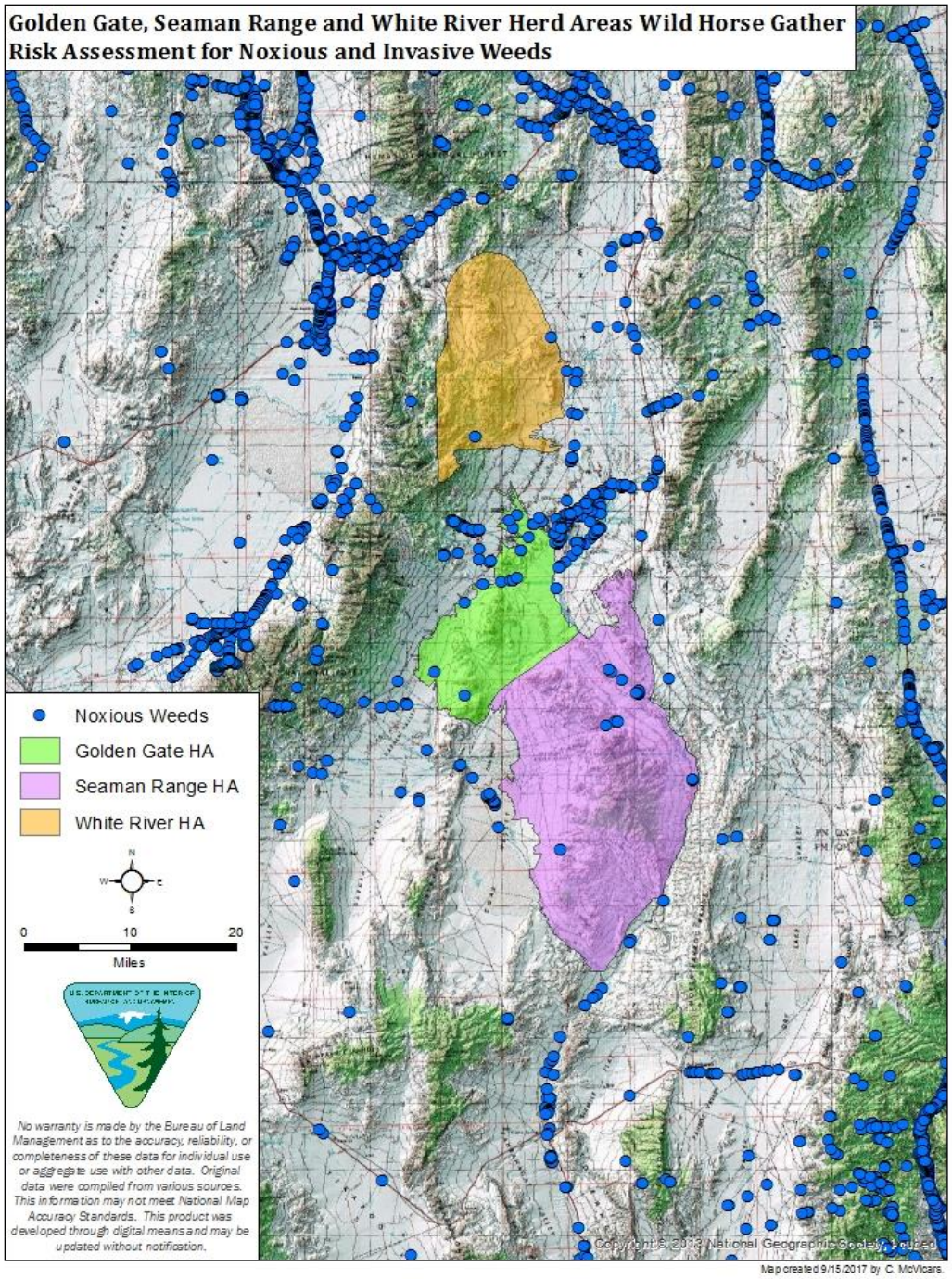
- Any discovery of newly established populations of noxious/invasive weeds will be communicated to the Ely District Noxious and Invasive Weeds Coordinator.

Reviewed by:  10/27/2017

Chris McVicars
Ely District Noxious & Invasive Weed Coordinator

Date

MAP 2 - PROJECT AREA NOXIOUS SPECIES



APPENDIX III

Allotments Located Within the Seaman and White River Herd Areas